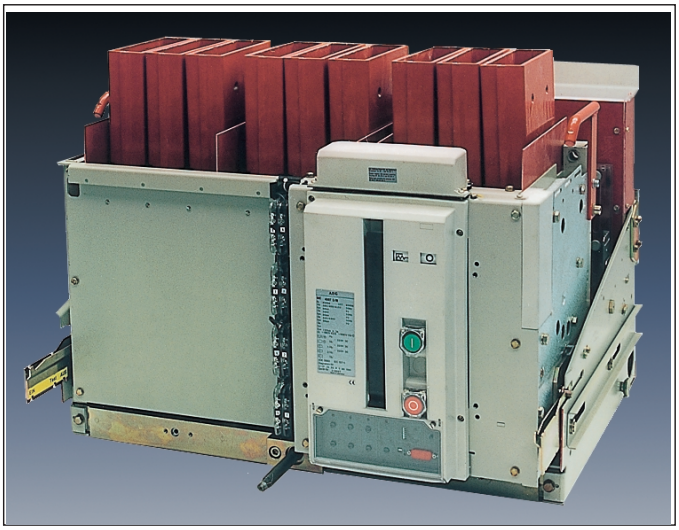
AEG Low Voltage

ME 07
Air Circuit Breakers



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Air circuit breakers 630 to 6400A

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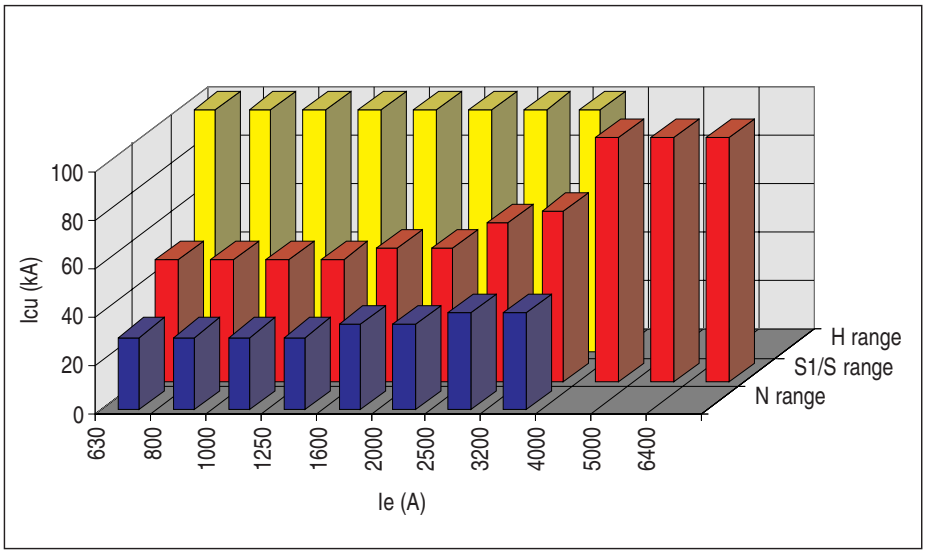


Three ranges of circuit breakers Series ME for time delayed selectivity with different breaking capacities in each frame size offer a compact and economic solution for all installations.

Economy range N

The economic solution for medium power distribution systems.

Standard range S1/S

The solution for heavy power distribution requirements with sufficiently high breaking capacity for complete time selective discrimination.

High performance range H

The compact solution for distribution of extremely high power levels up to 100 kA in industrial and marine installations in each frame size.

Complete line

- Compact, robust steel frame construction which reduces the space requirements within enclosures.
- Circuit breakers and disconnecting switches.
- 3- and 4-pole devices.
- Fixed and withdrawable versions.
- Appearance of the operator control panel in a modern industry design is identical for the complete productline.
- Drive mechanisms, trip units and accessories e.g. undervoltage trip, shunt trip and auxiliary contacts are common for all frame sizes.
- Manual or motor operated stored energy drive mechanism for direct and remote actuation.
- Microprocessor controlled trip units for all round protection.
- Bus connection.

Conformity

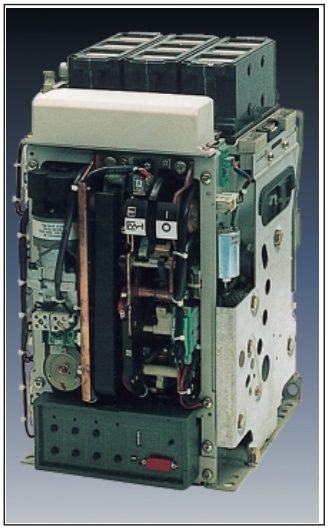
The circuit breakers Series ME07 comply with the standard “Low-voltage switchgear and controlgear” VDE 0660 Part 101, respectively IEC 947-2 and VDE 0113.
The disconnecting switches Series MET are in accordance with the standard “Low-voltage switchgear and controlgear” VDE 0660 Part 107, respectively IEC 947-3 and VDE 0113.

Certifications

ABS	American Bureau of Shipping
BV	Bureau Veritas
DNV	Det Norske Veritas
GL	German Lloyd
LRoS	Lloyd’s Register of Shipping
RINA	Registro Italiano Navale
RMRoS	Russian Maritime Register of Shipping

Design and specifications are subject to change without notice.

Fixed circuit breaker



Description

The **circuit breaker Series ME** is provided with an engaged latch mechanism with a trip-free feature housed in a steel frame construction. They are equipped with a hand operated drive mechanism, an electronic trip unit and auxiliary contacts. On request a wide range of accessories e.g. motor operated drive mechanism, auxiliary trips etc. can be ordered.
The **disconnecting switch Series MET** is identical with the circuit breaker but non automatic.

Degree of protection IP00, however IP54 can be achieved with an additional sealing kit for the door cut-out.

Terminations are available at the rear in horizontal or vertical plane, the design is interchangeable (ME637 to ME3207). Horizontal connection for stationary mounting and withdrawable technique are the same (ME1607 to ME3207).The devices ME4007/5007 are equipped with horizontal terminals.

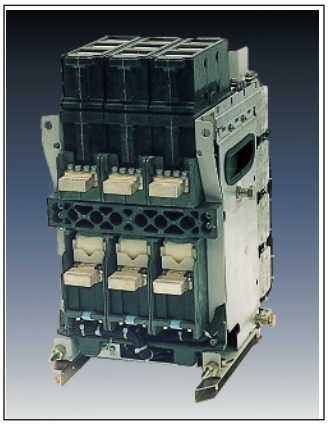
Installation

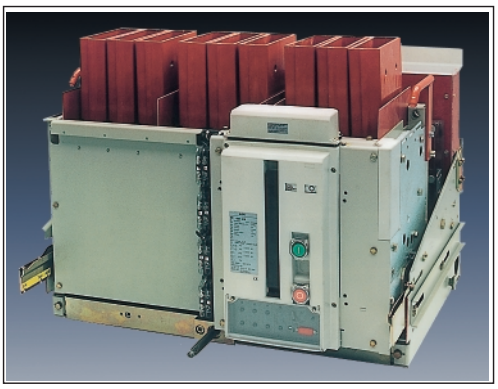
Base or rear mounting (vertical or horizontal traverse) is possible without additional parts. In combination with rear mounting and vertical terminations the use of two angular spacers is necessary to ensure the required creepage and clearance distances (ME637 to ME3207).
The devices ME4007 to ME5007 allow only rear side mounting.

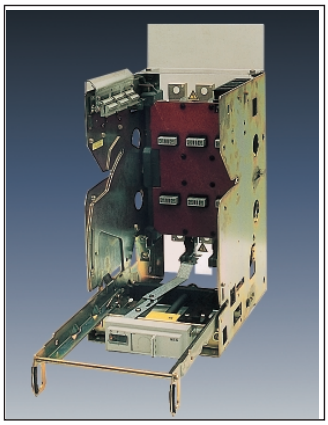
Power supply

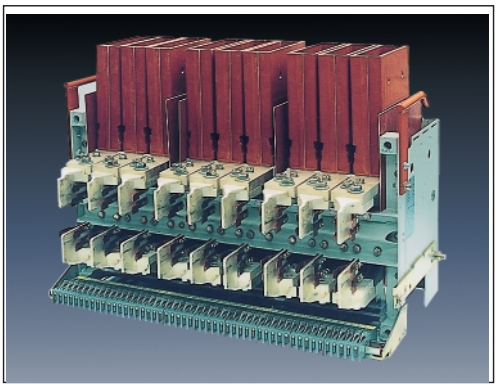
Either on the upper or on the lower terminals.
Wiring of control circuits on plug- and socket connectors, finger-safe.

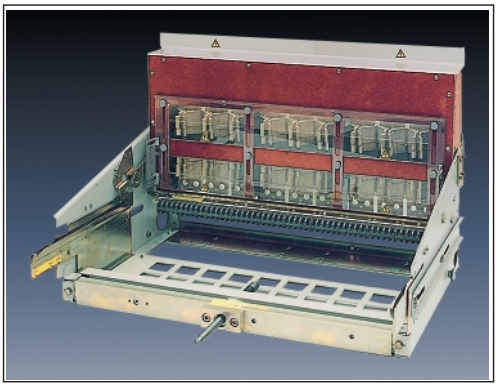
Withdrawable circuit breaker











Description

The Series ME withdrawable version consists of the both components circuit breaker and cradle.

The withdrawable version enables three defined positions

1. Disconnected
Both main and control circuits are disconnected.

2. Test
The main circuit contacts are open and the control circuit contacts are connected to allow functional tests of the device.

3. Connected
Both main and control circuit are connected.

The main contacts are provided with a full and positive personnel protection. The position of the circuit breaker within the cradle can be optionally indicated by position switches for monitoring and electrical interlocking. A mechanical interlock operates directly on the latch mechanism to prevent the circuit breaker being inserted or withdrawn in the closed position.

- Rated current up to 3200A
  After locating on the integrated telescopic extension rails and locking in the disconnected position the circuit breaker remains in this position. The electrical connection of the main circuit is achieved by a separate movable contact system operated by a cranking handle. It is located in a movable frame within the cradle. The position of the circuit breaker behind the switchboard door is independent of the positions disconnected, test and connected.
  The cradle is provided with a positively driven mechanical position indicator.
- Rated current 4000 to 6400A
  After locating on the rails the circuit breaker is inserted or withdrawn by means of a cranking handle worm drive. For easier service or exchange of the circuit breaker an optional extension rail is available to draw out the breaker in front of the cradle.

Installation

- Rated current up to 3200A
  Base mounting of the cradle, terminations at the rear in horizontal, vertical or combined plane. Wiring of the control circuits on plug and socket connectors on the upper left side, finger safe, accessible from the front. Automatic contact in the test and connected position. Optional position indication switches on the upper right side are accessible from the front as well.
- Rated current 4000 to 6400A
  Base mounting of cradle, terminations at the rear in horizontal or combined (upper horizontal, lower vertical) plane (4000A), in horizontal plane (5000A and 6400A). Easy wiring of the control circuit contacts and position indication switches.

Power supply

Either on the upper or on the lower terminals.

Notes

Economy range N
3- and 4-pole

Frame size			10				20		30	40
Series ME			**637N**	**807N**	**1007N**	**1257N**	**1607N**	**2007N**	**2507N**	**3207N**
Rated insulation voltage U_i			AC 1000V							
Rated impulse withstand voltage U_{imp}			8 kV							
Pollution degree			3							
Rated voltage U_e			Up to 3 AC 415V							
Rated current I_e			Fixed and withdrawable							
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.	Temperature									
	40 °C	(A)	630	800	1000	1250	1600	2000	2500	3200
	45 °C	(A)	630	800	1000	1250	1600	1980	2500	3200
	50 °C	(A)	630	800	1000	1250	1600	1920	2400	3200
	55 °C	(A)	630	800	1000	1250	1600	1840	2360	3200
	60 °C	(A)	630	800	1000	1250	1600	1760	2250	3100
Rated breaking capacity I_{cn} according to IEC 947-2 (RMS values) Power supply to top or bottom										
$I_{cu} = I_{cs}$	3 AC 400/415V	(kA)	30	30	30	30	35	35	40	40
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Rated making capacity I_{cm}										
Peak values	3 AC 400/415V	(kA)	63	63	63	63	73.5	73.5	84	84
Rated short time current I_{cw}	0.3s	(kA)	30	30	30	30	35	35	40	40
	1.0s	(kA)	30	30	30	30	35	35	40	40
	3.0s	(kA)	20	20	20	20	30	30	35	35
Selectivity up to		(kA)	30	30	30	30	35	35	40	40
RMS values		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Total breaking time										
via bse trip unit - s channel		(ms)	65	65	65	65	65	65	65	65
via bse trip unit - k channel		(ms)	45	45	45	45	45	45	45	45
Number of poles			3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/-
Mechanical endurance										
without maintenance		x10^3 ops.	5	5	5	5	5	5	2.5	2.5
with maintenance		x10^3 ops.	10	10	10	10	10	10	5	5
Switching frequency		ops. /h	60	60	60	60	60	60	30	30
Total power losses (3-pole) at rated current and breaker at operating temperature										
fixed version		(W)	75	105	145	205	230	325	405	445
withdrawable version		(W)	110	162	234	344	444	503	600	708

Standard range S1/S
3- and 4-pole

Frame size			10				20		30	40	
Series ME			637S1	807S1	1007S1	1257S1	1607S1	2007S1	2507S1	3207S1	
Rated insulation voltage U_i			AC 1000V								
Rated impulse withstand voltage U_{imp}			8 kV								
Pollution degree			3								
Rated voltage U_e			Up to 3 AC 690V								
Rated current I_e			Fixed and withdrawable								
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.	Temperature										
	40 °C	(A)	630	800	1000	1250	1600	2000	2500	3200/2000[1]	
	45 °C	(A)	630	800	1000	1250	1600	1980	2500	3200/1980	
	50 °C	(A)	630	800	1000	1250	1600	1920	2400	3200/1920	
	55 °C	(A)	630	800	1000	1250	1600	1840	2360	3200/1840	
	60 °C	(A)	630	800	1000	1250	1600	1760	2250	3100/1760	
Rated breaking capacity I_{cn} according to IEC 947-2 (RMS values) Power supply to top or bottom										III-	IV-pole
$I_{cu} = I_{cs}$	3 AC 400/415V	(kA)	50	50	50	50	55	55	65	70	65/55 [1]
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2	0.2/0.25
	3 AC 500V	(kA)	50	50	50	50	55	55	65	70	65/55
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2	0.2/0.25
	3 AC 690V	(kA)	50	50	50	50	55	55	65	70	65/55
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.2	0.2/0.25
Rated making capacity I_{cm} Peak values	3 AC 400/415V	(kA)	105	105	105	105	121	121	143	154	143/121[1]
	3 AC 500V	(kA)	105	105	105	105	121	121	143	154	143/121
	3 AC 690V	(kA)	105	105	105	105	121	121	143	154	143/121
Rated short time current I_{cw}											
	0.3s	(kA)	50	50	50	50	55	55	65	70	65/55[1]
	1.0s	(kA)	50	50	50	50	55	55	55	65	65/55
	3.0s	(kA)	20	20	20	20	30	30	35	40	40/30
Selectivity when “Switching ON”		(kA)	23	23	23	23	30	30	35	40	
RMS values (making current trip type kse)		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Setting value kse-trip (RMS value)		(kA)	35	35	35	35	45	45	52	60	
Selectivity with breaker “ON”		(kA)	50	50	50	50	55	55	65	70	
		cos φ	0.25	0.25	0.25	0.25	0.2	0.2	0.2	0.2	
Total breaking time											
via kse trip		(ms)	20	20	20	20	20	20	20	20	
via bse trip unit - s channel		(ms)	65	65	65	65	65	65	65	65	
via bse trip unit - k channel		(ms)	45	45	45	45	45	45	45	45	
Number of poles			3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
Mechanical endurance											
without maintenance		$x10^3$ ops.	10	10	10	10	10	10	5	5	
with maintenance		$x10^3$ ops.	20	20	20	20	20	20	10	10	
Switching frequency		ops. /h	60	60	60	60	60	60	30	30	
Total power losses (3-pole) at rated current and breaker at operating temperature											
fixed version		(W)	75	105	145	205	230	325	405	445	
withdrawable version		(W)	110	162	234	344	444	503	600	708	

(1) Second value for 4th pole

50	60	70
4007S	5007S	6307S
		Withdrawable
4000	5000	6400
4000	5000	6300
4000	5000	6300
–	–	–
–	–	–
100	100	100
0.2	0.2	0.2
100	100	100
0.2	0.2	0.2
100	100	100
0.2	0.2	0.2
220	220	220
220	220	220
220	220	220
100	100	100
100	100	100
55	55	55
–	–	–
– –	– –	– –
100	100	100
0.2	0.2	0.2
–	–	–
50	50	50
40	40	40
3/4	3/-	3/-
2.5	2.5	2.5
5	5	5
30	30	30
540	670	–
705	975	1510

High performance range H
3- and 4-pole

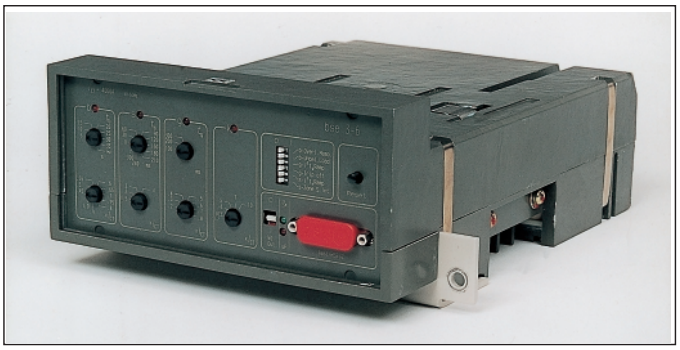
Frame size			10				20		30	40
Series ME			673H	807H	1007H	1275H	1607H	2007H	2507H	3207H
Rated insulation voltage U_i			AC 1000V							
Rated impulse withstand voltage U_{imp}			8 kV							
Pollution degree			3							
Rated voltage I_e			Up to 3 AC 1000V / up to DC 750V(1)							
Rated current I_e			Fixed and withdrawable							
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.		Temperature								
		40 °C (A)	630	800	1000	1250	1600	2000	2500	3200/2000(3)
		45 °C (A)	630	800	1000	1250	1600	1980	2500	3200/1980
		50 °C (A)	630	800	1000	1250	1600	1920	2400	3200/1920
		55 °C (A)	630	800	1000	1250	1600	1840	2360	3200/1840
		60 °C (A)	630	800	1000	1250	1600	1760	2250	3100/1760
Rated breaking capacity I_{cn} according to IEC 947-2 (RMS values) Power supply to top or bottom $I_{cu} = I_{cs}$	3 AC 400/415V	(kA)	100(2)	100(2)	100(2)	100(2)	100	100	100	100/100(3)
		cos φ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2/0.2
	3 AC 440V	(kA)	100(2)	100(2)	100(2)	100(2)	100	100	100	100/100
		cos φ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2/0.2
	3 AC 500V	(kA)	70	70	70	70	80	80	90	90/80
		cos φ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2/0.2
	3 AC 690V	(kA)	50	50	50	50	60	60	75	80/60
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.2/0.25
	3 AC 1000V(4)	(kA)	25	25	25	25	35	35	40	50
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	DC 220V, T = L/R = 15 ms(1)	(kA)	50	50	50	50	60	60	60	65/60
	DC 440V, T = L/R = 15 ms(1)	(kA)	40	40	40	40	45	45	45	50/45
	DC 750V, T = L/R = 15 ms(1)	(kA)	20	20	20	20	20	20	30	30/20
Rated making capacity I_{cm} Peak values	3 AC 400/415V	(kA)	220	220	220	220	220	220	220	220/220
	3 AC 440V	(kA)	220	220	220	220	220	220	220	220/220
	3 AC 500V	(kA)	154	154	154	154	176	176	198	198/176
	3 AC 690V	(kA)	105	105	105	105	132	132	165	176/132
	3 AC 1000V	(kA)	52.5	52.5	52.5	52.5	73.5	73.5	84	105/73.5
Rated short time current I_{cw}	0,3s	(kA)	50	50	50	50	55	55	65	70/55
	1,0s	(kA)	50	50	50	50	55	55	55	65/55
	3,0s	(kA)	20	20	20	20	30	30	35	40/30
Selectivity up to (at ON operation as well) RMS values		cos φ	23 0.25	23 0.25	23 0.25	23 0.25	30 0.25	30 0.25	35 0.25	40/30 0.25/0.25
Instantaneous short circuit trip type ks	RMS values	(kA)	35	35	35	35	45	45	52	60/45
	Peak values	(kA)	50	50	50	50	63	63	74	85/63
Total breaking time	via ks trip	(ms)	20	20	20	20	20	20	20	20
	via bse trip unit - s channel	(ms)	65	65	65	65	65	65	65	65
	via bse trip unit - k channel	(ms)	45	45	45	45	45	45	45	45
Number of poles			3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Mechanical endurance	without maintenance	x10^3 ops.	10	10	10	10	10	10	5	5
	with maintenance	x10^3 ops.	20	20	20	20	20	20	10	10
Switching frequency		ops. /h	60	60	60	60	60	60	30	30
Total power losses (3-pole) at rated current and breaker at operating temperature										
	fixed version	(W)	75	105	145	205	230	325	405	445
	withdrawable version	(W)	110	162	234	344	444	503	600	708

(1) For DC applications see section **Air circuit breakers Series ME07 for DC Applications**
(2) Withdrawable version - Icu 80kA
(3) Second value for 4th pole
(4) Only 3-pole version on request with horizontal termination, power supply upper terminals only, see also **Air circuit breakers Series ME07 for AC 1000V on page 21**

Terminal dimensions and cross section of copper busbars

Frame size		10				20		30	40	50	60	70
Series ME		**637**	**807**	**1007**	**1257**	**1607**	**2007**	**2507**	**3207**	**4007**	**5007**	**6307**
Ie	(A)	630	800	1000	1250	1600	2000	2500	3200	4000	5000	6400
Terminals	(mm)	40x20	40x20	40x20	40x20	60x20	60x20	80x20	130x20	190x20	255x20	3x120x12
Busbars	(mm)	1x40x8	1x40x10	1x40x12	2x40x10	2x50x10	2x60x12	2x80x12	4x60x12	6x60x12	8x60x12	6x120x12
Copper black painted	(mm^2)	320	400	480	800	1000	1440	1920	2880	4320	5760	8640

Electronic trip units type bse



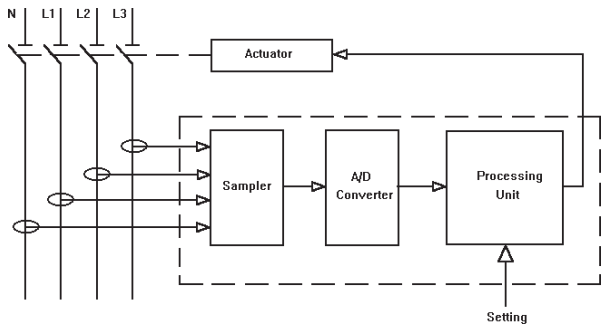
The electronic trip units type bse 3-x rms and bse 4-x rms are designed for applications in networks with harmonics and comply with the standard IEC 947-2, Appendix F.

Construction

The electronic tripping system consists of the components
- trip unit and
- current transformers.

The components are separately integrated into the circuit breaker. The current transformers supply the protection device of the trip unit and generate the output signal for the measuring unit.

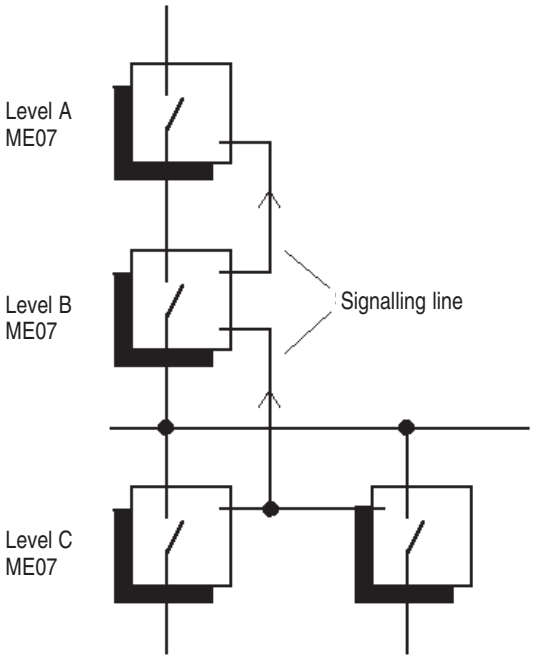
The principle of construction and function is shown in figure below.



The sampler receives the output signal from the current transformer and transfers the information to the Analog - Digital - Converter. The processing unit analyses the signal and compares the results with the parameter settings. In case of a fault condition, e.g. overload, the activator will be energised to trip the circuit breaker.
The current transformer output signal for each phase is sampled 15 times per cycle in order to establish a TRUE RMS value of the current independent of the network, type of load or installation.

Protection

The electronic trip units offer the protection as specified below:
- Overload, current depending time delay - **b-Channel**
- Short-circuit, current independent time delay, adjustable - **s-Channel**
- Short-circuit, instantaneous- **k-Channel**
- Short-circuit with **ZSI - Zone selective interlock.** This interlocking feature monitors the signal states of circuit breakers connected in series to reduce the pre-set delay time to a minimum and optimise the scheme for selectivity (see figure below).
- Earth fault, current independent time delay, adjustable - **g-Channel**



Block diagram ZSI - Zone selective interlock

The trip units are available for 3 and 4 pole circuit breakers. The adaptation to the different rated currents is realised by the corresponding current transformers.

The current transformer for the 4th pole of the trip unit is fitted inside the 4 pole version of the circuit breaker. On request a separately mounting outside the breaker e.g. in the neutral phase is possible. Then the connection between current transformer and trip unit must be field installed by applicant.

Contacts for TRIP indication are provided as well as TRIP indication LED's for types **bse 3/4-3 rms** to **bse 3/4-6 rms**.
For additional functions like indication, parameterizing, messages and BUS-connection (if available) an auxiliary power supply is necessary.

Functions

Type	bse 3-1 rms bse 4-1 rms	bse 3-2 rms bse 4-2 rms	bse 3-3 rms bse 4-3 rms	bse 3-3.1 rms bse 4-3.1 rms	bse 3-4 rms bse 4-4 rms	bse 3-5 rms bse 4-5 rms	bse 3-6 rms bse 4-6 rms	bse 3-7 rms bse 4-7 rms
b-Channel adjustable	•	•	•	•	•	•	•	•
Long time delay fixed on 20sec	•	•	–	–	–	–	–	–
Long time delay adjustable within 5...40 sec	–	–	•	•	•	•	–	–
Long time delay adjustable within 5...35 sec	–	–	–	–	–	–	•	•
Overload memory (ON/OFF)	–	–	–	–	–	–	•	–
Overload memory (ON/OFF) via BUS	–	–	–	–	–	–	–	•
Unbalanced load/ Phase loss sensitivity (ON/OFF)	–	–	–	–	–	–	•	–
Unbalanced load/ Phase loss sensitivity (ON/OFF) via BUS	–	–	–	–	–	–	–	•
Contact for indication TRIPPED	–	–	•	•	•	•	•	–
Indication TRIPPED via BUS	–	–	–	–	–	–	–	•
s-Channel adjustable	•	•	•	•	•	•	•	•
Time delay adjustable	–	•	•	•	•	•	•	•
I^2t -tripping characteristic (ON/OFF)	–	–	–	–	–	–	•	•
Contact for indication TRIPPED	–	–	•	•	•	•	•	•
Indication TRIPPED via BUS	–	–	–	–	–	–	–	•
Contact for immediate indication of s-channel threshold	–	–	•	•	•	•	•	•
k-Channel (ON/OFF)	–	–	•	•	•	•	•	•
Setting fixed	–	–	•	•	•	•	–	–
Setting adjustable	–	–	–	–	–	–	•	•
Contact for indication TRIPPED	–	–	•	•	•	•	•	–
Indication TRIPPED via BUS	–	–	–	–	–	–	–	•
g-Channel (Earth fault) (ONOFF)	–	–	–	–	•	•	•	•
Time delay adjustable	–	–	–	–	•	•	•	•
I^2t -tripping characteristic (ON/OFF)	–	–	–	–	–	–	•	•
Contact for indication TRIPPED	–	–	–	–	•	•	•	–
Indication TRIPPED via BUS	–	–	–	–	–	–	–	•
v-Channel (pre-alarm value adjustable via BUS)	–	–	–	–	–	–	–	•
Time delay adjustable via BUS	–	–	–	–	–	–	–	•
Indication via BUS	–	–	–	–	–	–	–	•
Indications								
bs-Channel Contact for indication TRIPPED (approx. 20ms if spring system is charged)	o	o	–	–	–	–	–	–
b-Channel with LED indication and contact (1 NO) for indication TRIPPED	–	–	•	•	•	•	•	•
s- Channel with LED indication and contact (1 NO) for indication TRIPPED	–	–	•	•	•	•	•	•
k- Channel with LED indication and contact (1 NO) for indication TRIPPED	–	–	•	•	•	•	•	•
g- Channel with LED indication and contact (1 NO) for indication TRIPPED	–	–	–	–	•	•	•	•
RESET button	–	–	•	•	•	•	•	•
Remote reset (24...230V AC/DC)	–	–	–	–	–	–	•	•
Auxiliary voltage 24 V DC ± 15%	–	–	•	•	•	•	•	•
60 to 230 V AC	–	–	•	•	–	–	–	–
ZSI (ON/OFF)	–	–	–	•	–	•	•	•
Watchdog (ON/OFF)	–	–	–	–	–	–	•	•
BUS connection	–	–	–	–	–	–	–	•
Test socket	•	•	•	•	•	•	•	•

o - accessory to be ordered separately

Electronic trip units type bse

Channels and settings

Overload channel type b

bse 3/4-1 rms to bse 3/4-5 rms: centrally adjustable in 10 steps within 0.4 to 1.0 I_{ct} (I_{ct} = rated current of current transformer)

bse 3/4-6 rms: centrally adjustable in 10 steps within 0.45 to 1.0 I_{ct}

bse 3/4-7 rms: adjustable via bus or RS-232 within 0.5 to 1.0 I_{ct}

Long time delay

bse 3/4-1 rms to bse 3/4-2 rms: fixed setting 20 sec

bse 3/4-3 rms to bse 3/4-6 rms: centrally adjustable in 8 steps within 5 to 40 sec.

bse 3/4-6 rms: centrally adjustable in 8 steps within 5 to 35 sec, OFF

bse 3/4-7 rms: adjustable via bus or RS-232 within 5 to 40 sec, ON/OFF switchable

Short-circuit channel type s

bse 3/4-1 rms to bse 3/4-5 rms

At I_e up to 1250A	within 1.5 to 14 times I_{ct} in 14 steps
2500A	within 1.5 to 8 times I_{ct} in 10 steps
3200A	within 1.5 to 5 times I_{ct} in 7 steps
4000A	within 1.5 to 4 times I_{ct} in 6 steps
5000A	within 1.5 to 3 times I_{ct} in 3 steps
6400A	within 1.5 to 3 times I_{ct} in 3 steps

bse 3/4-6 rms

At I_e up to 1250A	within 1.5 to 14 times I_{ct} in 10 steps
2500A	within 1.5 to 8 times I_{ct} in 8 steps
3200A	within 1.5 to 5 times I_{ct} in 5 steps
4000A	within 1.5 to 4 times I_{ct} in 4 steps
5000A	within 1.5 to 3 times I_{ct} in 3 steps
6400A	within 1.5 to 3 times I_{ct} in 3 steps

bse 3/4-1 rms to bse 3/4-6 rms: centrally adjustable
bse 3/4-7 rms: adjustable via bus or RS232

Short time delay

bse 3/4-2 rms to bse 3/4-5 rms: centrally adjustable within 30 to 300ms

bse 3/4-6 rms: centrally adjustable within 0 to 300ms

bse 3/4-7 rms: adjustable via bus or RS-232 within 0 to 300ms

Short-circuit channel type k

Instantaneously acting short circuit channel, can be switched OFF
bse 3/4-3 rms to bse 3/4-5 rms: fixed setting

At I_e up to 1250A	18 times I_{ct}
2500A	10 times I_{ct}
3200A	7 times I_{ct}
5000/6400A	10 times I_{ct}

bse 3/4-6 rms to bse 3/4-7 rms: centrally adjustable on trip unit

At I_e up to 1250A	within 4 to 18 times I_{ct} in 6 steps, OFF
2500A	within 4 to 10 times I_{ct} in 4 steps, OFF
3200A	within 4 to 7 times I_{ct} in 3 steps , OFF
4000A	within 4 to 10 times I_{ct} in 4 steps , OFF
5000/6400A	within 4 to 10 times I_{ct} in 4 steps, OFF

Earth fault channel type g

Adjustable in 7 steps within 0.2 to 0.8 times I_{ct} (for use of settings 0.2 to 0.3 times I_{ct} an external power supply is necessary) with a time delay function adjustable within 0.1 to 0.3 sec

bse 3/4-4 ms to bse 3/4-6 rms: centrally setting

bse 3/4-7 : setting via bus or RS-232

Pre-alarm channel type v

Available only on **bse 3/4-7 rms,** current independent delayed signal adjustable within 0.8 to 0.95 times of operating current setting I_b in steps of 0.05 times I_b, time delay adjustable within 25 to 100sec in 4 steps, setting via BUS or RS-232.

Trip indications

bse 3/4-1 rms to bse 3/4-2 rms: Trip indications by microswitch 1NO with automatic reset, short time contact 15 to 20ms if spring energy system charged.

bse3/4-3 rms to bse3/4-6 rms: Trip indication by LED and potential free, bistabile relay contact 1NC of the relevant channel (b, s, k or g) that initiated tripping. An auxiliary power supply is necessary for reset. The trip unit is provided with a potential free monostabile relay contact 1NC for the indication of s-channel threshold, ZSI and watchdog (bse3/4-6 only) .

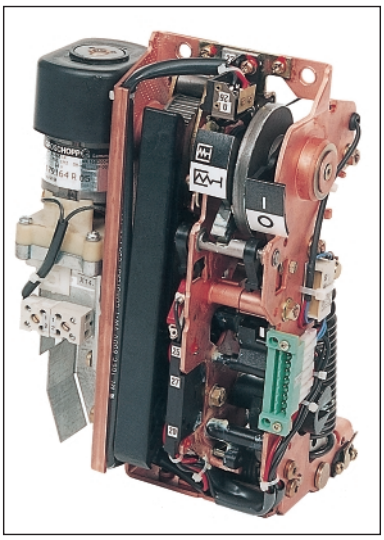
bse3/4-7 rms: Messages on operation, failures, disturbances, alarms and maintenance requirements are available via BUS, e.g. trip indication on the relevant channels, s-channel pre-alarm, v-channel, ZSI messages and watchdog are additionally signalled by potential free relay contacts

Technical data

Power consumption				
Type	Trip unit 24VDC ±15%	Trip unit 60 ... 230VAC	Relays	LED
bse 3/4 - 3 rms to bse 3/4 - 5 rms	0.6W	0.6W	-	-
bse 3/4 - 6 rms	1.5W	-	-	-
bse 3/4 - 7 rms	3.6W	-	-	-
bse 3/4 - 3 rms to bse 3/4 - 7 rms	-	-	30mA	5mA

Trip indication switch			
bse 3-1/4-1, bse 3-2/4-2 rms			
Rated operating voltage U_c	(V)	250	
AC - rated current ohmic	(A)	6	
AC - rated current inductive	(A)	2	
bse 3-3/4-3 to bse3-7/4-7 rms			
Rated operating voltage U_c	(V)	24 to 110	24 to 230
Rated current AC-11	(A)	–	max. 1
Rated current DC-11	(mA)	200	–

Drives



The drive mechanism with an energy storage facility is equipped with integral service facilities for immediate actuation without any additional coupling parts, e.g. through a door cut-out. Opening and closing action of the circuit breaker is made by pushbuttons. A positive operated indicator of the switch position and spring charge condition is provided along with a wide field of visibility to the trip unit.

Mechanism: ON operation mechanically with ON pushbutton or electrically with closing coil.

OFF operation mechanically with OFF pushbutton or electrically with undervoltage- or shunt trip.

Interlock with cylindrical lock or padlock

All mechanisms provided with a closing coil are suitable for synchronisation applications.

Manual operated mechanism with storage type x2, xv

The spring energy storage is charged by a pumping handle. The closing action is performed mechanically by means of the ON pushbutton or electrically by actuating the closing coil from a remote position.
Indication switch type m3 - Spring energy system charged - optional
Indication switch type m4 - Breaker ready for closure - optional

Motor operated mechanism with storage type fv and automatic control unit

The spring energy storage is charged by a motor drive. The automatic control unit operating with a short control impulse (app. 20 ms) disconnects the motor from supply after the spring is charged. The remote ON-operation is performed by actuating the closing coil. Manual charging and ON or OFF operations are possible as well.
The indication “Spring energy system charged“ is included in control unit, indication switch type m4 - “Breaker ready for closure” is optional available.

Five charging modes are available which can subsequently be changed in the field

Type fv1	Separate commands for charging and closing
Type fv2	Automatic charging after circuit breaker is opened.
Type fv3.1	Automatic charging after circuit breaker is closed with manual first-charging
Type fv3.2	Automatic charging after circuit breaker is closed with automatic first-changing
Type fv4	Automatic closing when spring is charged.

Drives (continued)

Technical data

Motor charging time of spring energy storage: 3 to 6 sec
Min. control impulse time: > 20 ms
Closing time: < 40 ms

Motor operated drive mechanism								
Operating range	(U_c)	085 - 1.1						
Rated control voltage U_c	(V)	24	42	48	60	110 - 120	125	220 - 240
Current 50/60Hz								
Power input	(VA)	–	300	–	–	450	–	max. 500
Current input (making)	(A)	–	20	–	–	12.9	–	7.5
Current input (200ms)	(A)	–	7	–	–	3.8	–	2.7
Current DC								
Power input	(W)	400	–	410	420	440	500	max. 440
Current input (making)	(A)	32	–	21	19	11	12	5.5
Current input (200ms)	(A)	16.5	–	8.5	7	4	4	2

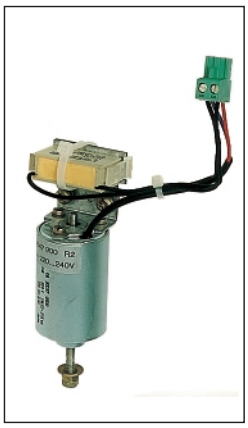
Closing coil									
Operating range	(U_c)	0,85 - 1,1							
Rated control voltage U_c	(V)	24	42	48	60	110 - 120	125	220	220 - 240
Current 50/60Hz									
Power input	(VA)	350	350	350	350	350	–	–	350
Current input	(A)	14.6	8.3	7.3	5.8	3.2	–	–	1.5
Current DC									
Power input	(W)	185	–	185	185	185	185	185	–
Current input	(A)	7.7	–	3.8	3.1	1.7	1.5	0.8	–

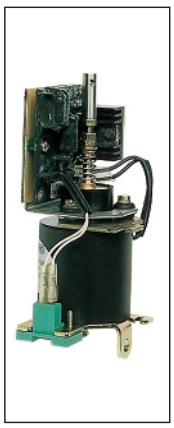
Indication switch m3 - "Spring energy storage charged" (potential free and potential tied)					
Rated operating voltage U_c	(V)	30	120	240	250[1]
AC - rated current					
Ohmic	(A)	–	10	7.5	6
Inductive (cos φ = 0,3)	(A)	–	7.5	5	1.5
DC rated current					
Ohmic	(A)	10	–	–	–
Inductive (L/R=7ms)	(A)	7.5	–	–	–

(1) Valid only for manual operated drive mechanism

Indication switch m4 - "Breaker ready for closure"						
Rated operating voltage U_c	(V)	24	50	110	220	250
AC - rated current						
Ohmic	(A)	–	–	–	–	5
Inductive	(A)	–	–	–	–	5
DC rated current						
Inductive	(A)	3	0.5	0.03	0.03	–

Auxiliary trips





Shunt trip and undervoltage trip facilitate the tripping of the circuit breaker from a remote position.

Shunt trip type “a”

The unit is suitable for remote tripping and short time rated. An integral microswitch is provided for self disconnecting from the power supply.

Undervoltage trip type “r”

The unit is suitable for remote tripping, voltage monitoring and for interlocking purposes trip free. The circuit breaker cannot be closed manually or electrically if the trip is deenergised.

Auxiliary trip combinations
Max. 2 shunt trips and 1 undervoltage trip.

Accessories

Capacitor trip unit type “n”

- **Type n1 -** internal version mounted in the enclosure of the trip unit, acting directly on the latch mechanism of the circuit breaker, no external shunt trip type “a” is necessary.
- **Type n2** - external version mounted in a plastic enclosure for separate fitting. A shunt trip type “a” 220V DC is necessary for tripping the circuit breaker (not included, please order separately).

Time delay unit type “c”
for undervoltage trip type r mounted in the steel enclosure type CK1 for separate fitting, delay time t_V=1.5 ± 0.5 s. An undervoltage trip type “r” 220V DC is necessary for tripping the circuit breaker (not included, please order separately).

Technical data

Shunt trip									
Operating range	U_c	0.7 to 1.1							
Actuation time min/max.		20 ms / 5 s							
Rated control voltage U_c	(V)	24	42	48	60	110...120	125	220	220 - 240
Current 50/60Hz									
Power input	(VA)	350	350	350	350	350	–	–	350
Current input	(A)	14.6	8.3	7.3	5.8	3.2	–	–	1.5
Current DC									
Power input	(W)	185	–	185	185	185	185	185	–
Current input	(A)	7.7	–	3.8	3.1	1.7	1.5	0.8	–

Undervoltage trip									
continuous operation		100%							
Operation range “Responding”	U_c	0.85 to 1.1							
Operation range “Releasing”	U_c	0.7 to 0.35							
Rated control voltage U_c	(V)	24	42	48	60	110	120/125	220 to 230	240
Current 50/60Hz AC/DC	(mA)	910	490	420	330	190	160	max. 90	80

Capacitor trip unit type “n”

Type n1	Rated voltage U_c 220/230V, operation range 0.85 to 1.1 U_c
Type n2	Rated voltage U_c 220/230V, operation range 0.0 to 1.1 U_c

Time delay unit type “c”

Rated voltage AC 50/60 Hz, 230V
Rated voltage AC 50/60 Hz, 110V, 220V, 380V, 400V, 440V, 500V with separate transformer

Auxiliary switches

The auxiliary switches are actuated directly by the cross bar and switch simultaneously with the main contacts.

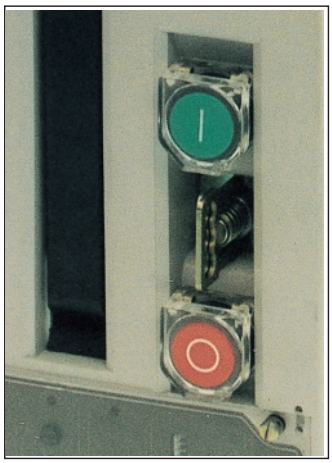
Technical data

Auxiliary switch						
Rated operational voltage U_e		500V				
Rated insulation voltage U_i		1000V				
Continuous current Ith		10A				
Rated operating Voltage U_c	(V)	24	60	110	220	230
AC11 duty	(A)	–	–	–	–	10
DC11 duty	(A)	10	4	2	1	–

Max. number of auxiliary contacts						
Key no.	Frame size	Breaker type	Plug no.	bse type	Aux. contacts	
Z	10 - 40	fixed/withdr.	X1 / X2	3-1/3-2	5NO	6NC
X	10 - 40	fixed/ withdr.	X1 / X2	3-3	5NO	5NC
V	10 - 40	fixed/ withdr.	X1 / X2	3-3.1/3-4/3-5	4NO	4NC
U	10 - 40	fixed/ withdr.	X1 / X2	3-6	3NO	4NC
C	50 - 60	fixed	X1 / X2	3-1/3-2	5NO	6NC
D	50 - 60	fixed	X1 / X2	3-3	5NO	5NC
E	50 - 60	fixed	X1 / X2	3-3.1/3-4/3-5	4NO	4NC
F	50 - 60	fixed	X1 / X2	3-6	3NO	4NC
G	50 - 70	withdr.	X20	3-1/3-2	5NO	6NC
H	50 - 70	withdr.	X20	3-3	5NO	5 NC
J	50 - 70	withdr.	X20	3-3.1/3-4/3-5	4NO	4 NC
K	50 - 70	withdr.	X20	3-6	3NO	4 NC

Locking devices

Cylindrical lock. Sealing cover



Padlock. Sealing cover

The locking devices type “y” are suitable for use on manual or motor operated mechanisms with a mechanical and if available an electrical interlock of the drive mechanism.

With cylindrical lock

Type y1	ON- and OFF push-button locked. The key is removable in both positions. The conditions of the breaker do not change when locked.
Type y2	ON - push-button locked. The key is removable in both positions. By means of locking the circuit breaker is switching off being in the ON position.
Type y3	ON - push-button locked. The key is removable in both positions. The conditions of the breaker do not change when locked.
Type y7	ON- and OFF push-button locked. The key is removable only in the locked position. Functions like y1
Type y8	ON - push-button locked. The key is removable only in the locked position. Functions like y2
Type y9	ON - push-button locked. The key is removable only in the locked position. Functions like y3

For 3 padlocks (bow diameter 6 to 8 mm)

Type y4	ON- and OFF push-button locked. Functions like y1
Type y5	ON - push-button locked. Functions like y2
Type y6	ON - push-button locked. Functions like y3

Sealing cover type “p”

Covers protect the ON and OFF push-buttons against unauthorised actuation.

Door adjustment frame type “ü”

The frame compensates tolerances between door cut out and front cover, suitable for fixed and/or withdrawable circuit breakers.

Sealing kit type “d”

Mounting kit to achieve protection degree IP54 in door cut-out for pumping handle and trip unit cover.

Door interlock type “q”

Interlock prevents opening of door when circuit breaker is closed, suitable for fixed installation (ME637 to ME3207)

Angular spacer

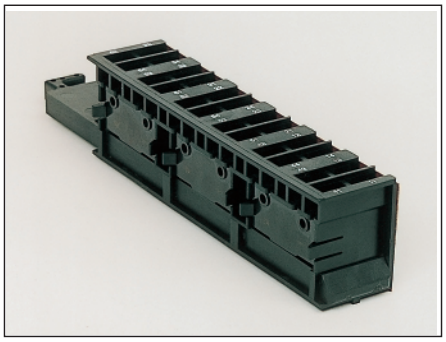
Two spacers are to be used for rear mounting in combination with vertical terminations to ensure the required creepage and clearance distances (ME637 to ME3207)

Bowden wire interlock type “g1”

Mounting kit for mechanical interlock of two circuit breakers for fixed installation (supplementary provide electrical interlock), installation alternatively side-by-side or superposed.
Max. length of bowden wire: 2300 mm

Withdrawable technique

Position indication switch



Auxiliary switches are provided for monitoring the positions DISCONNECTED - TEST - CONNECTED of the circuit breaker in the cradle and are suitable for electrical interlocking purposes.

ME637 to ME3207

A block is fitted on upright side of the cradle and contains max. 6 microswitches with 1CO contact each.

ME4007 to ME6307

Max. 4 auxiliary switches type HS5 with 2 NC and 2 NO each can be mounted inside the cradle. (max. 3 auxiliary switches possible with cradle having vertical terminations, ME4007S only).

Position indication switch							
Type ME		**637 to 3207**				**4007 to 6307**	
Rated operating Voltage U_c	(V)	30	50	125	250	250	400
AC - Rated current							
Ohmic	(A)	–	–	25	25	–	25
Inductive	(A)	–	–	15	15	–	–
DC - Rated current							
Ohmic	(A)	15	3	0.5	0.25	6	–
Inductive	(A)	5	1	0.5	0.25	–	–

Door interlocks

The interlocks prevent door opening when the circuit breaker is in the ON and TEST position.

ME637 to ME3207

Type Ily	Door (hinged left side) defeatable
Type Iln	Door hinged (left side) not defeatable
Type Iry	Door (hinged right side) defeatable (1)
Type Irn	Door (hinged right side) not defeatable (1)

(1) 2 auxiliary switches (1NC and 1NO) have been dropped

ME4007 to ME6307

Type Iy	Door defeatable
Type In	Door not defeatable

Locking facility type “wi”

The device prevents insertion of the cranking handle into the aperture by means of a cylindrical lock (ME637 to ME3207).

Locking facility type “we”

This mechanical interlock prevents insertion of the cranking handle into the aperture when circuit breaker is in the ON position (ME637 to ME3207).

Door sealing frame

Mounting kit for actuation the circuit breaker with door closed. The kit is provided with a cover to prevent insertion of cranking handle (ME4007S to ME6307S)

Bowden wire interlock type “g2”

Mounting kit for mechanical interlock of two circuit breakers for withdrawable pattern, (supplementary provide electrical interlock), installation alternatively side-by-side or superposed.
Max length of bowden wire
ME637 to ME3207: 1600 mm
ME4007 to ME6307: 2200 mm

Extension rail

Allows the withdrawal of the circuit breaker to the front of the cradle, e.g. for maintenance (ME4007 to ME6307).

Specify on the order

1. Type

Circuit breaker ❒ up to 500V ❒ up to 690V ❒ up to 1000V (only H-line)
Disconnecting switch ❒ up to 500V ❒ up to 690V ❒ up to 1000V (only H-line)

2. Line

❒ N (up to 415V) ❒ S1/S (only ME4007/6307) ❒ H

3. Rated current

❒ 250A ❒ 400A ❒ 630A ❒ 800A ❒ 1000A ❒ 1250A ❒ 1600A
❒ 2000A ❒ 2500A ❒ 3200A ❒ 4000A ❒ 5000A ❒ 6400A

4. No. of poles

❒ 3-pole ❒ 4-pole up to 4000A Neutral ❒ left or ❒ right (up to 2500A)

5. Version

❒ Fixed - Termination horizontal ❒ Fixed - Termination vertical up to 3200A
❒ Withdrawable

6. Drive

❒ Manual operated Type x2 ❒ Manual operated Type xv
❒ Motor operated with automatic control
❒ Type fv1 ❒ Type fv2 ❒ Type fv3.1
❒ Type fv3.2 ❒ Type fv4 Control voltage see item 10

7. Trip unit

❒ bse 3-1 rms	❒ bse 3-2 rms	❒ bse 3-3 rms	❒ bse 3-3.1 rms
❒ bse 3-4 rms	❒ bse 3-5 rms	❒ bse 3-6 rms	❒ bse 3-7 rms
❒ bse 4-1 rms	❒ bse 4-2 rms	❒ bse 4-3 rms	❒ bse 4-3.1 rms
❒ bse 4-4 rms	❒ bse 4-5 rms	❒ bse 4-6 rms	❒ bse 4-7 rms

8. Arc chute - Ceramic inserts

❒ only for S1 and H - Line up to 500V

9. Auxiliary trips

❒ Undervoltage trip ❒ 1. Shunt trip ❒ 2. Shunt trip
Control voltage see item 10
❒ Time delay unit Type c, AC 50/60 Hz 230V ❒ Other voltage _____ V
❒ Internal capacitor trip unit Type n1, AC 220/230V
❒ External capacitor trip unit Type n2, AC 220/230V

10. Control voltage

	Motor	Closing Coil	UV trip	1./2. Shunt trip
AC 50/60 Hz 42V	❒	❒	❒	❒ / ❒
AC 50/60 Hz 110V	❒	❒	❒	❒ / ❒
AC 50/60 Hz 220V	❒	❒	❒	❒ / ❒
AC 50/60 Hz 230V	❒	❒	❒	❒ / ❒
AC 50/60 Hz 240V	❒	❒	❒	❒ / ❒
DC 24V	❒	❒	❒	❒ / ❒
DC 48V	❒	❒	❒	❒ / ❒
DC 60V	❒	❒	❒	❒ / ❒
DC 110V	❒	❒	❒	❒ / ❒
DC 125V	❒	❒	❒	❒ / ❒
DC 220V	❒	❒	❒	❒ / ❒

11. Indication switch

❒ Trip Unit bse 3-1/4-1 rms, bse 3-2/4-2 rms - Indication m5: b+s Channel tripped
❒ Manual operated drive - Indication m3: spring energy storage charged
❒ Manual, motor operated drive with automatic control - Indication m4: breaker ready for closure.

12. Locking facilities

With cylindrical lock ❒ Type y1 ❒ Type y2 ❒ Type y3
❒ Type y7 ❒ Type y8 ❒ Type y9
With 3 padlocks ❒ Type y4 ❒ Type y5 ❒ Type y6
❒ Door interlock Type q
❒ Bowden wire interlock Type g1

13. Miscellaneous

❒ Sealing cover Type p
❒ Door adjustment frame Type ü
❒ Sealing kit Type d
❒ Angular spacer

14. Cradle

❒ Termination top/bottom vertical (ME637 tot ME3207)
❒ Termination top/bottom horizontal (ME 637 to ME 6307)
❒ Termination top horizontal/bottom vertical (ME 637 to ME4007S)

15. Position indication switch

for ME637 to 3207

❒ 1CO ❒ 2CO ❒ 3CO ❒ 4CO ❒ 5CO ❒ 6CO
❒ Connected ____ ❒ Test ____ ❒ Isolated ____

for ME4007 to 6307

❒ 1 HS 5 ❒ 2 HS 5 ❒ 3 HS 5 ❒ 4 HS 5
❒ Connected ____ ❒ Test ____ ❒ Isolated ____

16. Locking facilities - Withdrawable Version

Door interlock

ME637 to ME3207	❒ Type lly	❒ Type lln	❒ Type lry	❒ Type lrn
ME4007 to ME6307	❒ Type ly	❒ Type ln		

❒ Locking facility type wi (ME637 to ME3207)
❒ Locking facility type we (ME637 to ME3207)
❒ Bowden wire interlock Type g2

17. Miscellaneous

❒ Door sealing frame (ME4007 to ME6307)
❒ Extension rail (ME4007 to ME6307)

Up to 1000V AC

Description

The air circuit breakers are suitable for use in distributions of high power levels up to a rated voltage of AC 1000V. For these applications the standard types ME07H are provided with modified heightened arc chutes to cover the requirements at the higher rated voltage.
Terminations are rear side suitable only for horizontal plane. Power supply can be either on upper or lower terminals.
The fixed version of the circuit breaker can be mounted on the base without additional parts.
A withdrawable version is not available.
For accessories eg. motor drives, trip units, auxiliary trips please refer to the pages 12-18.

Conformity

The circuit breakers type ME07 comply with the standard “Low-voltage switchgear and controlgear” VDE 0660 Part 101, respectively IEC 947-2.

Technical values

Frame size			**10**				**20**		**40**	**50**
Series ME			**637H**	**807H**	**1007H**	**1257H**	**1607H**	**2007H**	**3207H**	**4007S** (1)(2)
Rated insulation voltage U_i			AC 1000V							
Rated impulse withstand voltage U_{imp}			8 kV							
Pollution degree			3							
Rated voltage U_e			Up to 3 AC 1000V							
Rated current I_e			Fixed							
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.	Temperature									
	40 °C	(A)	630	800	1000	1250	1600	2000	3200	4000
	45 °C	(A)	630	800	1000	1250	1600	1980	3200	4000
	50 °C	(A)	630	800	1000	1250	1600	1920	3200	4000
	55 °C	(A)	630	800	1000	1250	1600	1840	3200	–
	60 °C	(A)	630	800	1000	1250	1600	1760	3100	–
Rated breaking capacity I_{cn} according to IEC 947-2 (RMS values) Power supply to top $I_{cu} = I_{cs}$	3 AC 1000V	(kA)	30	30	30	30	35	35	50	55
		cos φ	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.2
Rated making capacity I_{cm} Peak values	3 AC 1000V	(kA)	63	63	63	63	73.5	73.5	105	121

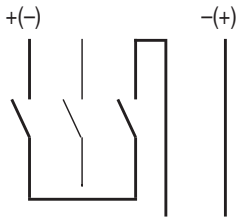
(1) Power supply only on upper terminals.
(2) Rated currents 5000A and 6300A on request.

Up to 750V DC

Description

For DC applications up to DC 750 V the standard 3-pole types MET07H - 690V version can be selected. An external overcurrent release operating on a shunt trip or on an undervoltage trip must be provided for overload and short circuit protection. The release and the auxiliary trip is to order separately.
For overcurrent releases, see below.
Due to identical dimensions the circuit breakers are available as fixed and withdrawable types.
For accessories e.g. motordrives, auxiliary trips, cradles, please refer to the pages 12-19.

Installation



The three pole breaker must be connected in the DC network as shown in the diagram.

Power supply

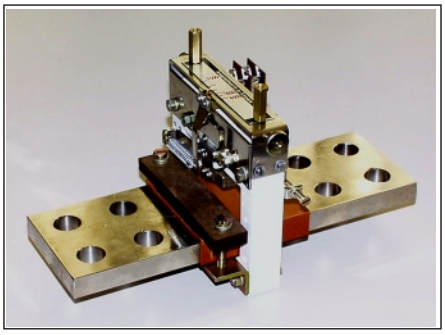
Power supply can be either on upper or lower terminals.

Conformity

The circuit breakers series ME07 comply with the standard “Low-voltage switchgear and controlgear” VDE 0660 Part 101, respectively IEC 947-2.

Technical values

Frame size		10				20		30	40
Type ME		637H	807H	1007H	1257H	1607H	2007H	2507H	3207H
Rated insulation voltage U_i		DC 1000V							
Rated impulse withstand voltage U_{imp}		8 kV							
Pollution degree		3							
Rated voltage U_e		Up to DC 750V							
Rated current I_e		Fixed and withdrawable							
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.	Temperature								
	40 °C (A)	630	800	1000	1250	1600	2000	2500	3200
	45 °C (A)	630	800	1000	1250	1600	1980	2500	3200
	50 °C (A)	630	800	1000	1250	1600	1920	2400	3200
	55 °C (A)	630	800	1000	1250	1600	1840	2360	3200
	60 °C (A)	630	800	1000	1250	1600	1760	2250	3100
Rated breaking capacity I_{cn} according to IEC 947-2									
Power supply to top or bottom $I_{cu} = I_{cs}$	DC 220V, T = L/R = 15 ms (kA)	50	50	50	50	60	60	60	65
	DC 440V, T = L/R = 15 ms (kA)	40	40	40	40	45	45	45	50
	DC 750V, T = L/R = 15 ms (kA)	20	20	20	20	20	20	30	30



Overcurrent release for DC

The overcurrent release mounted separately consists of an electromagnetic system for short circuit protection operating on a micro switch (1CO).

Technical data

Overcurrent release			
Rated insulation voltage U_i	DC 1500V		
Rated voltage U_e	up to DC 1500V		
Rated current I_e	630-1250A	1600-3600A	1600-3600
Adjusted setting values (continuously)	800/1200/1800A	1600/2000/3000A	2500/3200/3600A

Micro switch				
Rated insulation voltage U_i	(V)	380V		
Continuous current I_{th}	(A)	10		
Rated operating Voltage U_c	(V)	60	110	220
AC-11 duty	(A)	—	—	4
DC-11 duty (with arc deflector)	(A)	3	0.6	0.3

Series MEG07
up to 1200V -1500V DC

Description

The air circuit breakers are suitable for use in DC distributions up to a rated voltage of DC 1200V (single pole breaking) and DC 1500V (two pole breaking in series). For these applications the standard 3-pole types MET07H are provided with modified heightened arc chutes to cover the requirements.
The circuit breaker type MEG07 is equipped with an external overcurrent release operating on a shunt trip (standard) or if requested on a undervoltage trip (accessory). Details of overcurrent release see page 22.
The disconnecting switch type MEGT07 is identical with the circuit breaker type but non automatic.
For accessories e.g. motordrives, auxiliary trips please refer to pages 12-18.

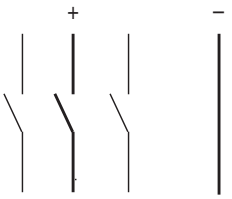
Installation

Terminations are rear side suitable only for horizontal plane. The circuit breaker can be mounted on the base without additional parts. A withdrawable version is not available.

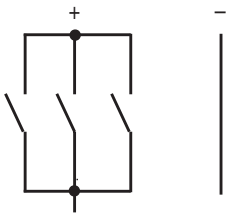
Power supply

1200V: upper terminals / 1500V: either on upper or lower terminals.
The circuit breaker must be connected in the DC network as shown in the diagrams below.

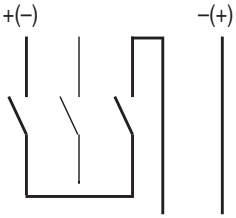
1200 V - Single pole breaking(2)



1200 V - Single pole breaking
for MEG 3207/10 and 5007/20



1500V - Single pole breaking - Two poles in series



Conformity

The circuit breakers type MEG07 comply with the standard “Low-voltage switchgear and controlgear” VDE 0660 Part 101, respectively IEC 947-2.
The disconnecting switch MEGT07 comply with the standard “Low-voltage switchgear and control gear” VDE 0660 Part 107, respectively IEC 947-3.

Technical values

Frame Size			**10**	**20**	**40**	**50**	**60**	**70**	**10**	**20**
Type MEG			**1257**	**2007**	**3207**	**4007**	**5007** (1)	**6307** (1)	**3207/10**	**5007/20**
Rated insulation voltage U_i			DC 1500V							
Rated impulse withstand voltage U_{imp}			8 kV							
Pollution degree			3							
Rated voltage U_e			Up to DC 1500V						DC 1200V(3)	
Rated current I_e			Fixed							
Protection degree IP00 For use in enclosures with interior temperatures of 40 to 60ºC, the relevant IP00 values can be applied basically. Connection cross sections are to be rated to the rated current of the equipment.	Temperature									
	40 °C	(A)	1250	2000	3200	4000	5000	6400	3200	5000
	45 °C	(A)	1250	1980	3200	4000	5000	6300	3200	5000
	50 °C	(A)	1250	1920	3200	4000	5000	6300	3200	5000
	55 °C	(A)	1250	1840	3200					
	60 °C	(A)	1250	1760	3100					
Rated breaking capacity I_{cn} according to IEC 947-2										
Power supply to top	DC 750V(3)	(kA)	-	-	-	-	-	-	10	10
	DC 1200V	(kA)	30	30	35	40	45	45	30	20
$I_{cu} = I_{cs}$	DC 1500V	(kA)	20	20	25	25	30	30	-	-

(1) On request
(2) Two pole breaking on request
(3) Version for stationary railway application acc. to EN 50123-2 and -3, only type MEGT for DC 750V

Economy range N

Circuit breaker type ME07
3-pole, 4-pole up to 415V AC

Circuit breaker 3-pole, 4-pole equipped with:
- current transformer
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1)

Neutral conductor
Unprotected with bse 3-1 rms, alternatively 100%, 63% or 50% protection of main circuit with bse 4-1 rms.
Please refer to ordering details **electronic trip unit** on page 39

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole							
10	ME637N	630	250	**758100**	44	**758101**	47
10	ME637N	630	400	**758102**	44	**758103**	47
10	ME637N	630	630	**758104**	44	**758105**	47
10	ME800N	800	800	**758106**	45	**758107**	48
10	ME1007N	1000	1000	**758108**	45	**758109**	50
10	ME1257N	1250	1250	**758110**	46	**758111**	53
20	ME1607N	1600	1600	**758112**	52	**758113**	62
20	ME2007N	2000	2000	**758114**	52	**758115**	62
30	ME2507N	2500	2500	**758116**	76	**758117**	90
40	ME3207N	3200	3200	**758118**	89	**758119**	109
4-pole - Neutral conductor left							
10	ME637N/IV	630	250	**758516**	59	**758388**	65
10	ME637N/IV	630	400	**758504**	59	**758394**	65
10	ME637N/IV	630	630	**758472**	59	**758400**	65
10	ME800N/IV	800	800	**758440**	60	**758408**	66
10	ME1007N/IV	1000	1000	**758997**	60	**758414**	68
10	ME1257N/V	1250	1250	**758992**	61	**758421**	71
20	ME1607N/IV	1600	1600	**758267**	73	**758442**	88
20	ME2007N/IV	2000	2000	**758235**	73	**758448**	88
30	ME2507N/IV	2500	2500	**758166**	88	**758460**	107
4-pole - Neutral conductor right							
10	ME637N/IV	630	250	**758410**	59	**758411**	65
10	ME637N/IV	630	400	**758412**	59	**758413**	65
10	ME637N/IV	630	630	**758414**	59	**758415**	65
10	ME800N/IV	800	800	**758416**	60	**758417**	66
10	ME1007N/IV	1000	1000	**758418**	60	**758419**	68
10	ME1257N/IV	1250	1250	**758420**	61	**758421**	71
20	ME1607N/IV	1600	1600	**758422**	73	**758423**	88
20	ME2007N/IV	2000	2000	**758424**	73	**758425**	88
30	ME2507N/IV	2500	2500	**758426**	88	**758427**	107

(1) For other trip unit types please refer to table on page 18

Standard range S1

Circuit breaker type ME07
3-pole, 4-pole up to 500VAC

Circuit breaker 3-pole, 4-pole equipped with:
- current transformer,
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1)

Neutral conductor
Unprotected with bse 3-1 rms, 100%, 63% or 50% protection (ME637 to 2507S1/IV), 63% or 50% protection (ME3207S1/IV) of main circuit with bse 4-1 rms.
Please refer to ordering details **electronic trip unit** on page 39

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole							
10	ME637S1	630	250	**758140**	44	**758141**	47
10	ME637S1	630	400	**758142**	44	**758143**	47
10	ME637S1	630	630	**758144**	44	**758145**	47
10	ME800S1	800	800	**758146**	45	**758147**	48
10	ME1007S1	1000	1000	**758148**	45	**758149**	50
10	ME1257S1	1250	1250	**758150**	46	**758151**	53
20	ME1607S1	1600	1600	**758152**	52	**758153**	62
20	ME2007S1	2000	2000	**758154**	52	**758155**	62
30	ME2507S1	2500	2500	**758156**	76	**758157**	90
40	ME3207S1	3200	3200	**758158**	89	**758159**	109
4-pole - Neutral conductor left							
10	ME637S1/IV	630	250	**758164**	59	**758390**	65
10	ME637S1/IV	630	400	**758496**	59	**758395**	65
10	ME637S1/IV	630	630	**758464**	59	**758403**	65
10	ME800S1/IV	800	800	**758999**	60	**758409**	66
10	ME1007S1/IV	1000	1000	**758995**	60	**758417**	68
10	ME1257S1/IV	1250	1250	**758990**	61	**758423**	71
20	ME1607S1/IV	1600	1600	**758259**	73	**758444**	88
20	ME2007S1/IV	2000	2000	**758227**	73	**758449**	88
30	ME2507S1/IV	2500	2500	**758971**	88	**758461**	107
40	ME3207S1IV	3200/2000	3200/2000	**759540**	104	**759541**	128
4-pole - Neutral conductor right							
10	ME637S1/IV	630	250	**758430**	59	**758431**	65
10	ME637S1/IV	630	400	**758432**	59	**758433**	65
10	ME637S1/IV	630	630	**758434**	59	**758435**	65
10	ME800S1/IV	800	800	**758436**	60	**758437**	66
10	ME1007S1/IV	1000	1000	**758438**	60	**758439**	68
10	ME1257S1/IV	1250	1250	**758440**	61	**758441**	71
20	ME1607S1/IV	1600	1600	**758442**	73	**758443**	88
20	ME2007S1/IV	2000	2000	**758444**	73	**758445**	88
30	ME2507S1/IV	2500	2500	**758446**	88	**758447**	107

(1) For other trip unit types please refer to table on page 18

High performance range H

Circuit breaker type ME07
3-pole, 4-pole up to 500V AC

Circuit breaker 3-pole, 4-pole equipped with:
- current transformer
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1)

Neutral conductor
Unprotected with bse 3-1 rms, 100%, 63% or 50% protection (ME637 to 2507H/IV), 63% or 50% protection (ME3207H/IV) of main circuit with bse 4-1 rms.
Please refer to ordering details **electronic trip unit** on page 39

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole							
10	ME637H	630	250	**758190**	44	**758191**	47
10	ME637H	630	400	**758192**	44	**758193**	47
10	ME637H	630	630	**758194**	44	**758195**	47
10	ME800H	800	800	**758196**	45	**758197**	48
10	ME1007H	1000	1000	**758198**	45	**758199**	50
10	ME1257H	1250	1250	**758200**	46	**758201**	53
20	ME1607H	1600	1600	**758202**	52	**758203**	62
20	ME2007H	2000	2000	**758204**	52	**758205**	62
30	ME2507H	2500	2500	**758206**	76	**758207**	90
40	ME3207H	3200	3200	**758208**	89	**758209**	109
4-pole - Neutral conductor left							
10	ME637H/IV	630	250	**758519**	59	**758329**	65
10	ME637H/IV	630	400	**758514**	59	**758331**	65
10	ME637H/IV	630	630	**758482**	59	**758326**	65
10	ME800H/IV	800	800	**758383**	60	**758406**	66
10	ME1007H/IV	1000	1000	**758998**	60	**758323**	68
10	ME1257H/IV	1250	1250	**758386**	61	**758420**	71
20	ME1607H/IV	1600	1600	**758277**	73	**758188**	88
20	ME2007H/IV	2000	2000	**758981**	73	**758447**	88
30	ME2507H/IV	2500	2500	**758176**	88	**758126**	107
40	ME3207H/IV	3200/2000	3200/2000	**759543**	104	**758229**	128
4-pole - Neutral conductor right							
10	ME637H/IV	630	250	**758450**	59	**758451**	65
10	ME637H/IV	630	400	**758452**	59	**758453**	65
10	ME637H/IV	630	630	**758454**	59	**758455**	65
10	ME800H/IV	800	800	**758456**	60	**758457**	66
10	ME1007H/IV	1000	1000	**758458**	60	**758459**	68
10	ME1257H/IV	1250	1250	**758460**	61	**758461**	71
20	ME1607H/IV	1600	1600	**758462**	73	**758463**	88
20	ME2007H/IV	2000	2000	**758464**	73	**758465**	88
30	ME2507H/IV	2500	2500	**758466**	88	**758467**	107

(1) For other trip unit types please refer to table on page 18

Standard range S1/S

Circuit breaker type ME07
3-pole, 4-pole up to 690V AC

Circuit breaker 3-pole, 4-pole equipped with:
- current transformer,
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1)

Neutral conductor
Unprotected with bse 3-1 rms, 100%, 63% or 50% protection (ME637 to 2507S1/IV; ME4007S/IV), 63% or 50% protection (ME3207S1/IV), of main circuit with bse 4-1 rms.
Please refer to ordering details **electronic trip unit** on page 39

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole							
10	ME637S1	630	250	**758570**	44	**758571**	47
10	ME637S1	630	400	**758572**	44	**758573**	47
10	ME637S1	630	630	**758574**	44	**758575**	47
10	ME800S1	800	800	**758576**	45	**758577**	48
10	ME1007S1	1000	1000	**758578**	45	**758579**	50
10	ME1257S1	1250	1250	**758580**	46	**758581**	53
20	ME1607S1	1600	1600	**758582**	52	**758583**	62
20	ME2007S1	2000	2000	**758584**	52	**758585**	62
30	ME2507S1	2500	2500	**758586**	76	**758587**	90
40	ME3207S1	3200	3200	**758588**	89	**758589**	109
50	ME4007S	4000	4000	**758160**	145	–	–
60	ME5007S	5000	5000	**758162**	175	–	–
70	ME6307S(2)	6400	6400	**758726**	205	–	–
4-pole - Neutral conductor left							
10	ME637S1/IV	630	250	**758592**	59	**758593**	65
10	ME637S1/IV	630	400	**758594**	59	**758595**	65
10	ME637S1/IV	630	630	**758596**	59	**758597**	65
10	ME800S1/IV	800	800	**758598**	60	**758599**	66
10	ME1007S1/IV	1000	1000	**758600**	60	**758601**	68
10	ME1275S1/IV	1250	1250	**758602**	61	**758603**	71
20	ME1607S1/IV	1600	1600	**758604**	73	**758605**	88
20	ME2007S1/IV	2000	2000	**758606**	73	**758607**	88
30	ME2507S1/IV	2500	2500	**758608**	88	**758609**	107
40	ME3207S1IV	3200/2000	3200/2000	**758610**	104	**758611**	128
50	ME4007S/IV(3)	4000	4000	**759542**	175	–	–
4-pole - Neutral conductor right							
10	ME637S1/IV	630	250	**758612**	59	**758613**	65
10	ME637S1/IV	630	400	**758614**	59	**758615**	65
10	ME637S1/IV	630	630	**758616**	59	**758617**	65
10	ME800S1/IV	800	800	**758618**	60	**758619**	66
10	ME1007S1/IV	1000	1000	**758620**	60	**758621**	68
10	ME1257S1/IV	1250	1250	**758622**	61	**758623**	71
20	ME1607S1/IV	1600	1600	**758624**	73	**758625**	88
20	ME2007S1/IV	2000	2000	**758626**	73	**758627**	88
30	ME2507S1/IV	2500	2500	**758628**	88	**758629**	107

(1) For other trip unit types please refer to table on page 18
(2) Only available with withdrawable technique
(3) Type ME5007S/IV, 5000A withdrawable breaker on request

High performance range H

Circuit breaker type ME07
3-pole, 4-pole up to 690V AC

Circuit breaker 3-pole, 4-pole equipped with:
- current transformer
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1)

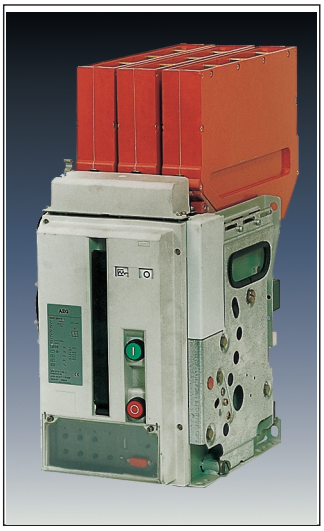
Neutral conductor
Unprotected with bse 3-1 rms, 100%, 63% or 50% protection (ME637 to 2507H/IV), 63% or 50% protection (ME3207H/IV) of main circuit with bse 4-1 rms.
Please refer to ordering details **electronic trip unit** on page 39

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole							
10	ME637H	630	250	**758630**	44	**758568**	47
10	ME637H	630	400	**758688**	44	**758633**	47
10	ME637H	630	630	**758634**	44	**758635**	47
10	ME800H	800	800	**758636**	45	**758637**	48
10	ME1007H	1000	1000	**758638**	45	**758639**	50
10	ME1257H	1250	1250	**758640**	46	**758641**	53
20	ME1607H	1600	1600	**758642**	52	**758643**	62
20	ME2007H	2000	2000	**758644**	52	**758645**	62
30	ME2507H	2500	2500	**758646**	76	**758647**	90
40	ME3207H	3200	3200	**758648**	89	**758649**	109
4-pole - Neutral conductor left							
10	ME637H/IV	630	250	**758650**	59	**758651**	65
10	ME637H/IV	630	400	**758652**	59	**758653**	65
10	ME637H/IV	630	630	**758654**	59	**758655**	65
10	ME800H/IV	800	800	**758656**	60	**758657**	66
10	ME1007H/IV	1000	1000	**758658**	60	**758659**	68
10	ME1257H/IV	1250	1250	**758660**	61	**758661**	71
20	ME1607H/IV	1600	1600	**758662**	73	**758663**	88
20	ME2007H/IV	2000	2000	**758664**	73	**758665**	88
30	ME2507H/IV	2500	2500	**758666**	88	**758667**	107
40	ME3207H/IV	3200/2000	3200/2000	**758668**	104	**758669**	128
4-pole - Neutral conductor right							
10	ME637H/IV	630	250	**758670**	59	**758671**	65
10	ME637H/IV	630	400	**758672**	59	**758673**	65
10	ME637H/IV	630	630	**758674**	59	**758675**	65
10	ME800H/IV	800	800	**758676**	60	**758677**	66
10	ME1007H/IV	1000	1000	**758678**	60	**758679**	68
10	ME1257H/IV	1250	1250	**758680**	61	**758681**	71
20	ME1607H/IV	1600	1600	**758582**	73	**758683**	88
20	ME2007H/IV	2000	2000	**758684**	73	**758685**	88
30	ME2507H/IV	2500	2500	**758686**	88	**758687**	107

(1) For other trip unit types please refer to table on page 18

High performance range H
Standard range S

Circuit breaker type ME07
3-pole, up to 1000V AC



Circuit breaker 3-pole equipped with:
- current transformer
- electronic trip unit type bse 3-1 rms
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC(1) (without current transformer and electronic trip unit)

Frame size	Type	Rated current of breaker I_u A	Rated current of current transformer I_{CT} A	Vertical terminals Heightened arc chute (extended breaking capacity) Ref. No.	kg
3-pole					
10	ME637H	630	250	**784161**	57
10	ME637H	630	400	**784162**	57
10	ME637H	630	630	**784163**	57
10	ME800H	800	800	**784164**	58
10	ME1007H	1000	1000	**784165**	58
10	ME1257H	1250	1250	**784166**	59
20	ME1607H	1600	1600	**784167**	65
20	ME2007H	2000	2000	**784168**	65
40	ME3207H	3200	3200	**784169**	113
50	ME4007S	4000	4000	**784170**	190
60	ME5007S	5000	5000	**784171**	233
70	ME6307S	6400	6400	**784172**	266

(1) For other trip unit types please refer to table on page 18

Economy range N

Disconnecting switch type MET07
3-pole, 4-pole, up to 415V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of switch I_u A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole						
10	MET637N	630	**758000**	40	**758001**	43
10	MET800N	800	**758002**	41	**758228**	44
10	MET1007N	1000	**758004**	41	**758005**	46
10	MET1257N	1250	**758006**	42	**758007**	48
20	MET1607N	1600	**758008**	48	**758009**	58
20	MET2007N	2000	**758010**	48	**758011**	58
30	MET2507N	2500	**758012**	71	**758013**	85
40	MET3207N	3200	**758014**	83	**758015**	102
4-pole - Neutral conductor left						
10	MET637N/IV	630	**758984**	45	**758370**	61
10	MET800N/IV	800	**758256**	46	**758375**	62
10	MET1007N/IV	1000	**758222**	46	**758380**	64
10	MET1257N/IV	1250	**758358**	47	**758426**	67
20	MET1607N/IV	1600	**758315**	69	**758433**	84
20	MET2007N/IV	2000	**758217**	69	**758452**	84
30	MET2507N/IV	2500	**758969**	83	**759304**	102
4-pole - Neutral conductor right						
10	MET637N/IV	630	**758360**	45	**758361**	61
10	MET800N/IV	800	**758362**	46	**758363**	62
10	MET1007N/IV	1000	**758364**	46	**758365**	64
10	MET1257N/IV	1250	**758366**	47	**758367**	67
20	MET1607N/IV	1600	**758368**	69	**758369**	84
20	MET2007N/IV	2000	**758370**	69	**758371**	84
30	MET2507N/IV	2500	**758372**	83	**758373**	102

Standard range S1

Disconnecting switch type MET07 3-pole, 4-pole, up to 500V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of breaker I_u A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole						
10	MET637S1	630	**758016**	40	**758017**	43
10	MET800S1	800	**758018**	41	**758019**	44
10	MET1007S1	1000	**758020**	41	**758021**	46
10	MET1257S1	1250	**758022**	42	**758023**	48
20	MET1607S1	1600	**758024**	48	**758025**	58
20	MET2007S1	2000	**758026**	48	**758027**	58
30	MET2507S1	2500	**758028**	71	**758029**	85
40	MET3207S1	3200	**758030**	83	**758031**	102
4-pole - Neutral conductor left						
10	MET637S1/IV	630	**758268**	45	**758983**	61
10	MET800S1/IV	800	**758248**	46	**758231**	62
10	MET1007S1/IV	1000	**758214**	46	**758973**	64
10	MET1257S1/IV	1250	**758989**	47	**758427**	67
20	MET1607S1/IV	1600	**758307**	69	**758988**	84
20	MET2007S1/IV	2000	**758979**	69	**758453**	84
30	MET2507S1/IV	2500	**758459**	83	**758125**	102
40	MET3207S1/IV	3200/2000	**758080**	98	**758081**	122
4-pole - Neutral conductor right						
10	MET637S1/IV	630	**758374**	45	**758375**	61
10	MET800S1/IV	800	**758376**	46	**758377**	62
10	MET1007S1/IV	1000	**758378**	46	**758379**	64
10	MET1257S1/IV	1250	**758380**	47	**758381**	67
20	MET1607S1/IV	1600	**758382**	69	**758383**	84
20	MET2007S1/IV	2000	**758384**	69	**758385**	84
30	MET2507S1/IV	2500	**758386**	83	**758387**	102

High performance range H

Disconnecting switch type MET07
3-pole, 4-pole, up to 500V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of switch I_u A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole						
10	MET637H	630	**758036**	40	**758037**	43
10	MET800H	800	**758038**	41	**758039**	44
10	MET1007H	1000	**758040**	41	**758041**	46
10	MET1257H	1250	**758042**	42	**758043**	48
20	MET1607H	1600	**758044**	48	**758045**	58
20	MET2007H	2000	**758046**	48	**758047**	58
30	MET2507H	2500	**758048**	71	**758049**	85
40	MET3207H	3200	**758050**	83	**758051**	102
4-pole - Neutral conductor left						
10	MET637H/IV	630	**758985**	45	**758257**	61
10	MET800H/IV	800	**758240**	46	**758223**	62
10	MET1007H/IV	1000	**758977**	46	**758631**	64
10	MET1257H/IV	1250	**758342**	47	**758316**	67
20	MET1607H/IV	1600	**758299**	69	**758986**	84
20	MET2007H/IV	2000	**758975**	69	**758181**	84
30	MET2507H/IV	2500	**758132**	83	**758965**	102
40	MET3207H/IV	3200/2000	**758098**	98	**758099**	122
4-pole - Neutral conductor right						
10	MET637H/IV	630	**758388**	45	**758389**	61
10	MET800H/IV	800	**758390**	46	**758391**	62
10	MET1007H/IV	1000	**758392**	46	**758393**	64
10	MET1257H/IV	1250	**758394**	47	**758395**	67
20	MET1607H/IV	1600	**758396**	69	**758397**	84
20	MET2007H/IV	2000	**758398**	69	**758399**	84
30	MET2507H/IV	2500	**758400**	83	**758401**	102

Standard range S1/S

Disconnecting switch type MET07 3-pole, 4-pole, up to 690V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of breaker I_u A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole						
10	MET637S1	630	**759306**	40	**758471**	43
10	MET800S1	800	**759307**	41	**758473**	44
10	MET1007S1	1000	**758474**	41	**758475**	46
10	MET1257S1	1250	**758476**	42	**758477**	48
20	MET1607S1	1600	**758478**	48	**758479**	58
20	MET2007S1	2000	**759308**	48	**758481**	58
30	MET2507S1	2500	**759309**	71	**758483**	85
40	MET3207S1	3200	**758484**	83	**758485**	103
50	MET4007S	4000	**758032**	138	–	–
60	MET5007S	5000	**758034**	165	–	–
70	MET6307S(1)	6400	**758518**	200	–	–
4-pole - Neutral conductor left						
10	MET637S1/IV	630	**758488**	45	**758489**	61
10	MET800S1/IV	800	**758491**	46	**758490**	62
10	MET1007S1/IV	1000	**758492**	46	**758493**	64
10	MET1257S1/IV	1250	**759310**	47	**758495**	67
20	MET1607S1/IV	1600	**759311**	69	**758497**	84
20	MET2007S1/IV	2000	**758498**	69	**758499**	84
30	MET2507S1/IV	2500	**758500**	83	**758501**	102
40	MET3207S1/IV	3200/2000	**759312**	98	**758503**	122
50	MET4007S/IV	4000	**758082**	165	–	–
4-pole - Neutral conductor right						
10	MET637S1/IV	630	**758504**	45	**758505**	61
10	MET800S1/IV	800	**758506**	46	**758507**	62
10	MET1007S1/IV	1000	**758508**	46	**758509**	64
10	MET1257S1/iV	1250	**758510**	47	**758511**	67
20	MET1607S1/IV	1600	**758512**	69	**758513**	84
20	MET2007S1/IV	2000	**758514**	69	**758515**	84
30	MET2507S1/IV	2500	**758516**	83	**758517**	102

(1) Only available with withdrawable technique.

High performance range H

Disconnecting switch type MET07
3-pole, 4-pole, up to 690V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of switch I_u A	Horizontal terminals Ref. No.	kg	Vertical terminals Ref. No.	kg
3-pole						
10	MET637H	630	**758520**	40	**758521**	43
10	MET800H	800	**758522**	41	**758523**	44
10	MET1007H	1000	**758524**	41	**758525**	46
10	MET1257H	1250	**758526**	42	**758527**	48
20	MET1607H	1600	**758528**	48	**758529**	58
20	MET2007H	2000	**758530**	48	**758531**	58
30	MET2507H	2500	**758532**	71	**758533**	85
40	MET3207H	3200	**758534**	83	**758535**	102
4-pole - Neutral conductor left						
10	MET637H/IV	630	**758536**	45	**758537**	61
10	MET800H/IV	800	**758538**	46	**758539**	62
10	MET1007H/IV	1000	**758540**	46	**758541**	64
10	MET1257H/IV	1250	**758542**	47	**758543**	67
20	MET1607H/IV	1600	**758544**	69	**758545**	84
20	MET2007H/IV	2000	**758546**	69	**758547**	84
30	MET2507H/IV	2500	**758548**	83	**758549**	102
40	MET3207H/IV	3200/2000	**758550**	98	**758551**	122
4-pole - Neutral conductor right						
10	MET637H/IV	630	**758552**	45	**758553**	61
10	MET800H/IV	800	**758554**	46	**758555**	62
10	MET1007H/IV	1000	**758556**	46	**758557**	64
10	MET1257H/IV	1250	**758558**	47	**758559**	67
20	MET1607H/IV	1600	**758560**	69	**758561**	84
20	MET2007H/IV	2000	**758562**	69	**758563**	84
30	MET2507H/IV	2500	**758564**	83	**758565**	102

High performance range H
Standard range S

Disconnecting switch type MET07
3-pole, up to 1000V AC

Disconnecting switch equipped with
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC (without current transformer and electronic trip unit)

Frame size	Type	Rated current of switch I_u A	Horizontal terminals Heightened arc chute Ref. No.	kg	
3-pole					
10	MET637H	630	**784173**	53	
10	MET800H	800	**784174**	54	
10	MET1007H	1000	**784175**	54	
10	MET1257H	1250	**784176**	55	
20	MET1607H	1600	**784177**	61	
20	MET2007H	2000	**784178**	61	
30	MET2507H	2500	**784184**	96	
40	MET3207H	3200	**784179**	107	
50	MET4007S(1)	4000	**784180**	183	
60	MET5007S(1)	5000	**784181**	223	
70	MET6307S(1)	6400	**784182**	261	

(1) On request

Circuit breaker type MEG07
Up to 1500V DC

Circuit breaker equipped with:
- handoperated mechanism type X2
- external overcurrent release
- shunt trip 230V AC
- 11 auxiliary contacts 5 NO, 6 NC

Frame size	Type	Rated current of breaker I_u A	Horizontal terminals Ref. No.	kg	Horizontal terminals Ref. No.	kg
			Up to 1200V		Up to 1500V	
10	MEG1257	1250	**784130**	45	**784138**	51
20	MEG2007	2000	**784131**	52	**784139**	58
40	MEG3207	3200	**784132**	86	**784140**	99
10	MEG3207/10	3200	**784133**	84	**-**	
50	MEG4007	4000	**784134**	154	**784141**	172
60	MEG5007	5000	**784135**	182	**784142**	207
20	MEG5007/20	5000	**784136**	178	**-**	
70	MEG6307	6400	**784137**	221	**784143**	245

Two pole types for DC 1200V on request.

Disconnecting switch type MEGT07
Up to 1500V DC

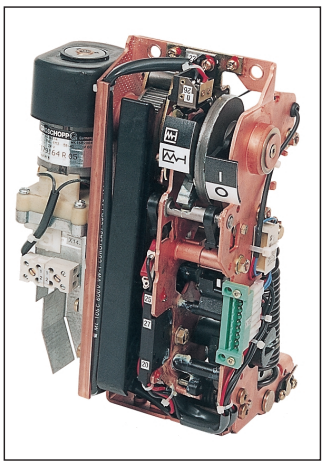
Disconnecting switch equipped with:
- handoperated mechanism type X2
- 11 auxiliary contacts 5 NO, 6 NC
  (without external overcurrent release, shunt trip 230V AC)

Frame size	Type	Rated current of switch I_u A	Horizontal terminals Ref. No.	kg	Horizontal terminals Ref. No.	kg
			Up to 1200V		Up to 1500V	
10	MEGT1257	1250	**784144**	43	**784152**	49
20	MEGT2007	2000	**784145**	49	**784153**	55
40	MEGT3207	3200	**784146**	84	**784154**	96
10	MEGT3207/10	3200	**784147**	84	**-**	
50	MEGT4007	4000	**784148**	149	**784155**	167
60	MEGT5007	5000	**784149**	178	**784156**	202
20	MEGT5007/20	5000	**784150**	178	**-**	
70	MEGT6307	6400	**784151**	216	**784157**	241

Two pole types for DC 1200V on request.

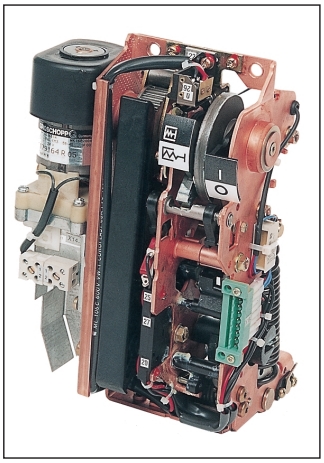
ME07 - Order codes

Drives



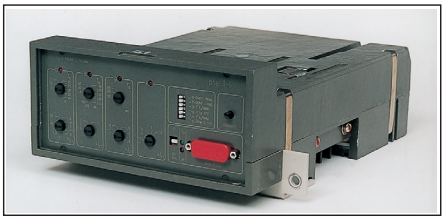
Type x2	Ref. No.	
Manual operated mechanism with storage operation by manual ON/OFF button	**Standard**	
Type xv		
Manual operated machnism with storage, closing coil		
42V, AC 50/60Hz	**758730**	
110V, AC 50/60Hz	**758731**	
220V, AC 50/60Hz	**758732**	
230V, AC 50/60Hz	**758733**	
240V, AC 50/60Hz	**758734**	
24V, DC	**758735**	
48V, DC	**758736**	
60V, DC	**758737**	
110V, DC	**758738**	
125V, DC	**758739**	
220V, DC	**758740**	
Type fv1		
All type fv with automatic control unit Motor operated mechanism with storage Separate command for charging and closing		
42V, AC 50/60Hz	**758741**	
110V, AC 50/60Hz	**758742**	
220V, AC 50/60Hz	**758743**	
230V, AC 50/60Hz	**758744**	
240V, AC 50/60Hz	**758745**	
24V, DC	**758746**	
48V, DC	**758747**	
60V, DC	**758748**	
110V, DC	**758749**	
125V, DC	**758750**	
220V, DC	**758751**	
Type fv2		
Automatic charging after circuit breaker is opened		
42V, AC 50/60Hz	**758752**	
110V, AC 50/60Hz	**758753**	
220V, AC 50/60Hz	**758754**	
230V, AC 50/60Hz	**758755**	
240V, AC 50/60Hz	**758756**	
24V, DC	**758757**	
48V, DC	**758758**	
60V, DC	**758759**	
110V, DC	**758760**	
125V, DC	**758761**	
220V, DC	**758762**	

Drives (continued)



Type fv3.1	Ref. No.	
Automatic charging after circuit breaker is closed, with manual first charging		
42V, AC 50/60Hz	758763	
110V, AC 50/60Hz	758764	
220V, AC 50/60Hz	758765	
230V, AC 50/60Hz	758766	
240V, AC 50/60Hz	758767	
24V, DC	758768	
48V, DC	758769	
60V, DC	758770	
110V, DC	758771	
125V, DC	758772	
220V, DC	758773	
Type fv3.2		
Automatic charging after circuit breaker is opened or closed, with automatic first charging		
42V, AC 50/60Hz	758774	
110V, AC 50/60Hz	758775	
220V, AC 50/60Hz	758776	
230V, AC 50/60Hz	758777	
240V, AC 50/60Hz	758778	
24V, DC	758779	
48V, DC	758780	
60V, DC	758781	
110V, DC	758782	
125V, DC	758783	
220V, DC	758784	
Type fv4		
Automatic closing when spring is charged		
42V, AC 50/60Hz	758785	
110V, AC 50/60Hz	758786	
220V, AC 50/60Hz	758787	
230V, AC 50/60Hz	758788	
240V, AC 50/60Hz	758789	
24V, DC	758790	
48V, DC	758791	
60V, DC	758792	
110V, DC	758793	
125V, DC	758794	
220V, DC	758795	

Electronic trip unit for AC



Type bse 3-x rms	Auxiliary Voltage	Aux. Switches	Ref. no.	
bse 3-1 rms	n.a.	5s+6ö	bse3-1 rms-XX	
bse 3-2 rms	n.a.	5s+6ö	bse3-2 rms-XX	
bse 3-3 rms-24D	24V DC	5s+5ö	bse3-3 rms-24D-XX	
bse 3-3 rms-125A	60-125V AC	5s+5ö	bse3-3 rms-125A-XX	
bse 3-3 rms-230A	125-230V AC	5s+5ö	bse3-3 rms-230A-XX	
bse 3-3.1 rms-24D	24V DC	4s+4ö	bse3-3.1 rms-24D-XX	
bse 3-3.1 rms-125A	60-125V AC	4s+4ö	bse3-3.1 rms-125A-XX	
bse 3-3.1 rms-230A	125-230V AC	4s+4ö	bse3-3.1 rms-230A-XX	
bse 3-4 rms-24D	24V DC	4s+4ö	bse3-4 rms-24D-XX	
bse 3-5 rms-24D	24V DC	4s+4ö	bse3-5 rms-24D-XX	
bse 3-6 rms-24D	24V DC	3s+3ö	bse3-6 rms-24D-XX	
bse 3-7 rms-24D	24V DC	3s+3ö	bse3-7 rms-24D-XX	
Type bse 4-x rms(1)				
bse 4-1 rms	n.a.	5s+6ö	bse4-1 rms-XX	
bse 4-2 rms	n.a.	5s+6ö	bse4-2 rms-XX	
bse 4-3 rms-24D	24V DC	5s+5ö	bse4-3 rms-24D-XX	
bse 4-3 rms-125A	60-125V AC	5s+5ö	bse4-3 rms-125A-XX	
bse 4-3 rms-230A	125-230V AC	5s+5ö	bse4-3 rms-230A-XX	
bse 4-3.1 rms-24D	24V DC	4s+4ö	bse4-3.1 rms-24D-XX	
bse 4-3.1 rms-125A	60-125V AC	4s+4ö	bse4-3.1 rms-125A-XX	
bse 4-3.1 rms-230A	125-230V AC	4s+4ö	bse4-3.1 rms-230A-XX	
bse 4-4 rms-24D	24V DC	4s+4ö	bse4-4 rms-24D-XX	
bse 4-5 rms-24D	24V DC	4s+4ö	bse4-5 rms-24D-XX	
bse 4-6 rms-24D	24V DC	3s+3ö	bse4-6 rms-24D-XX	
bse 4-7 rms-24D	24V DC	3s+3ö	bse4-7 rms-24D-XX	

Selection Code

Frame size	Current transformer	3-pole bse 3-x rms	4-pole(1) bse 4-x rms
10	250A	02	02
10	400A	04	04
10	630A	06	06
10	800A	08	08
10	1000A	10	10
10	1250A	12	12
20	1600A	16	16
20	2000A	20	20
30	2500A	25	25
40	3200A	32	32 (63% protection)
50	4000A	40	40
60	5000A	50	-
70	6400A	64	-

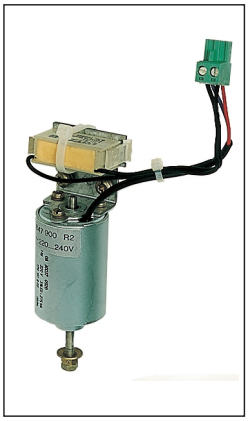
Overcurrent release for DC

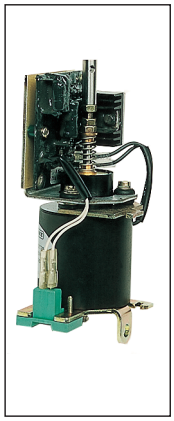
Overcurrent release for MEG 07 up to 1500V DC			
Rated current Ie	630-1250A	1600-3600A	1600-3600A
Adjusted setting values (continuously)	800/1200/1800A	1600/2000/3000A	2500/3200/3600A
Ref. No.	**760216**	**760217**	**760218**

Note - The MEG 07 must be provided with a shunt trip or undervoltage trip connected to the micro switch of the overcurrent release. Ordering details of shunt trip and undervoltage trip see next page.

(1) 100% protection for N-pole, 63% and 50% protection on request.

Auxiliary trips





Shunt trip type a	Ref. No.	
42V, AC 50/60Hz	758818	
110V, AC 50/60Hz	758819	
220V, AC 50/60Hz	758820	
230V, AC 50/60Hz	758821	
240V, AC 50/60Hz	758822	
24V, DC	758823	
48V, DC	758824	
60V, DC	758825	
110V, DC	758826	
125V, DC	758827	
220V, DC	758828	
Shunt trip type r		
42V, AC 50/60Hz	758829	
110V, AC 50/60Hz	758830	
220V, AC 50/60Hz	758831	
230V, AC 50/60Hz	758832	
240V, AC 50/60Hz	758833	
24V, DC	758834	
48V, DC	758835	
60V, DC	758836	
110V, DC	758837	
125V, DC	758838	
220V, DC	758839	

Accessories for auxiliary trips

Time delay unit type c		
For undervoltage trip (undervoltage trip 220V DC required) Rated operating voltage:		
AC 50/60Hz, 230V, 220V DC	758843	
AC 50/60Hz, 110V, with external transformer	758844	
AC 50/60Hz, 380V, with external transformer	758845	
AC 50/60Hz, 400V, with external transformer	758846	
AC 50/60Hz, 440V, with external transformer	758847	
Capacitor trip unit type n1		
Internal version, no shunt trip type a necessary Operating range 0.85 ... 1.1 Uc	758848	
External version, shunt trip type a 220V DC required Operating range 0.0 ... 1.1 Uc	758849	

Indication switches

Type	Ref. No.	kg
Trip indication switch type m5 For b+s-channel, 1 self resetting NO switch pulse actuation, quick make contact about 15 to 20 ms if spring system is charged, otherwise continuous contact (trip unit type bse 3/4-1 and bse 3/4-2 rms only)	**758850**	0.15
Indication switch type m3 "Spring energy system charged" for hand operated mechanism. With motor operated mechanism and automatic control unit indication always supplied, not available with microswitch controlled mechanism	**758851**	0.15
Indication switch type m4 "Breaker ready for closure". Indication: Breaker OFF, spring energy system charged, undervoltage trip if available energised for hand and motor operated mechanism, standard with microswitch controlled mechanism.	**758852**	0.15

Locking facilities

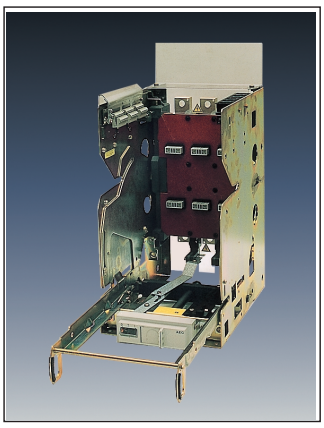
Position locking devices for hand and motor operated mechanism			
With cylindrical lock			
Type y1	ON and OFF push-button locked key removable in both positions	**758853**	–
Type y2	ON push-button locked key removable in both positions	**758854**	–
Type y3	ON push-button locked key removable in both positions	**On request**	–
Type y7	ON and OFF push-button locked key removable when locked	**758855**	–
Type y8	ON push-button locked key removable when locked	**758856**	–
Type y9	ON push-button locked key removable when locked	**On request**	–
For 3 padlocks			
Type y4	ON and OFF push-button locked	**758857**	–
Type y5	ON push-button locked	**758858**	–
Type y6	ON push-button locked	**On request**	–
Sealing cover type p			
Protection against unauthorized actuation of ON and OFF push-button		**758859**	–

Accessories

Type	Ref. No.	kg
Clear cover for trip unit type k For trip unit bse 3/4-x rms	**564243**	–
Door adjustment frame type ü Compensation of tolerances between door cutout and front cover	**758860**	–
Sealing kit type d Mounting kit to achieve IP54 in door cutout, for pumping handle and trip unit cover	**758860**	0.3
Door interlock type q Prevents opening of door when circuit breaker is closed (fixed version only)	**758862**	–
Angular spacer For rear mounting in combination with vertical termination (2 pieces required)	**758863**	–
Bowden wire interlock type g1 Mounting kit for mechanical interlock of 2 circuit breakers (fixed version), supplementary provide electrical interlock	**758864**	
Ceramic inserts For arc chutes to reduce clearance distances (only for range S1 and H 500V) Frame sizes 10 ... 30 Frame size 40	 **758840** **758841**	 – –
Test set type P107 for electronic trip unit type bse3/4-X	**758349**	–
Test set type P107 rms for electronic trip unit type bse3/4-X rms	**75999**	–

Withdrawable technique

Cradle 3-pole, 4-pole



Cradle provided with personnel protection by positively activated shutter, positive mechanical indication of functional position of breaker.

ME637 to 3207: Integrated telescopic extension rails, padlocking facility against insertion of cranking handle, 3 socket connectors = 48 contacts for control circuit connection.
In version “v” and “k” the terminals are accessable from the front.

ME4007 to 6307: 48 control circuit contacts

Cradle for circuit breaker type	Cradle type	Short-circuit capacity kA	Termination	Ref. No.	kg
3-pole					
ME367 to 1007 S1,N	T10v1	105	Upper and lower vertical	**759305**	40
ME637 to 1257 H,S1,N	T10v2	176	Upper and lower vertical	**758241**	40
ME1607 H, S1, N	T20v1	220	Upper and lower vertical	**758242**	47
ME2007 H, S1, N	T20v2	220	Upper and lower vertical	**758243**	47
ME2507 H, S1, N	T30v	220	Upper and lower vertical	**758244**	55
ME3207 H, S1, N	T40v	220	Upper and lower vertical	**758245**	80
ME637 to 1007 S1,N	T10w1	105	Upper and lower horizontal	**758250**	40
ME637 to 1257 H,S1,N	T10w2	176	Upper and lower horizontal	**758251**	40
ME1607 H, S1, N	T20w1	220	Upper and lower horizontal	**758252**	47
ME2007 H, S1, N	T20w2	220	Upper and lower horizontal	**758253**	47
ME2507 H, S1, N	T30w	220	Upper and lower horizontal	**758254**	55
ME3207 H, S1, N	T40w	220	Upper and lower horizontal	**758255**	80
ME4007 S	T50	220	Upper and lower horizontal	**759544**	80
ME5007 S	T60	220	Upper and lower horizontal	**759545**	65
ME6307 S	T70	220	Upper and lower horizontal	**759546**	80
ME637 to 1007 S1,N	T10k1	105	Upper horizontal, lower vertical	**758260**	40
ME637 to 1257 H,S1,N	T10k2	176	Upper horizontal, lower vertical	**758261**	40
ME1607 H, S1, N	T20k1	220	Upper horizontal, lower vertical	**758262**	47
ME2007 H, S1, N	T20k2	220	Upper horizontal, lower vertical	**758263**	47
ME2507 H, S1, N	T30k	220	Upper horizontal, lower vertical	**758264**	55
ME3207 H, S1, N	T40k	220	Upper horizontal, lower vertical	**758265**	80
4-pole					
ME637 to 1007 S1, N	T10v1/IV	105	Upper and lower vertical	**758270**	48
ME637 to 1257 H,S1,N	T10v2/IV	176	Upper and lower vertical	**758271**	48
ME1607 H, S1, N	T20v1/IV	220	Upper and lower vertical	**758272**	55
ME2007 H, S1, N	T20v2/IV	220	Upper and lower vertical	**758273**	55
ME2507 H, S1, N	T30v/IV	220	Upper and lower vertical	**758274**	58
ME3207 H, S1, N	T40v/IV	220	Upper and lower vertical	**759546**	92
ME637 to 1007 S1,N	T10w/IV	105	Upper and lower horizontal	**758280**	48
ME637 to 1257 H,S1,N	T10w2/IV	176	Upper and lower horizontal	**758281**	48
ME1607 H, S1, N	T20w1/IV	220	Upper and lower horizontal	**758282**	55
ME2007 H, S1, N	T20w2/IV	220	Upper and lower horizontal	**758283**	55
ME2507 H, S1, N	T30w/IV	220	Upper and lower horizontal	**758284**	58
ME3207 H, S1, N	T40w/IV	220	Upper and lower horizontal	**758285**	92
ME4007 S	T50w/IV	220	Upper and lower horizontal	**758286**	65
ME637 to 1007 S1,N	T10k1/IV	105	Upper horizontal, lower vertical	**758290**	48
ME637 to 1257 H,S1,N	T10k2/IV	176	Upper horizontal, lower vertical	**758291**	48
ME1607 H, S1, N	T20k1/IV	220	Upper horizontal, lower vertical	**758292**	55
ME2007 H, S1, N	T20k2/IV	220	Upper horizontal, lower vertical	**758293**	55
ME2507 H, S1, N	T30k/IV	220	Upper horizontal, lower vertical	**758294**	58
ME3207 H, S1, N	T40k/IV	220	Upper horizontal, lower vertical	**758295**	92

Type ME5007S/IV, 5000A withdrawable breaker on request.

Withdrawable technique

Accessories

Accessories for cradle		
Position indication switch Alternatively for indication of disconnected-, test- and connected position		
Frame sizes 10...40		
1 switch 1CO	**758302**	
2 switches 2 CO	**758303**	
3 switches 3 CO	**758304**	
4 switches 4 CO	**759549**	
5 switches 5 CO	**759306**	
6 switches 6 CO	**759550**	
Frame sizes 50...70		
1 switch 2 NO, 2 NC	**759551**	
2 switches 4 NO, 4 NC	**759552**	
3 switches 6 NO, 6 NC	**759553**	
4 switches 8 NO, 8 NC (only frame sizes 50...60)	**759554**	
Door interlocks Prevents door opening when circuit breaker is in ON and TEST position		
Frame sizes 10...40		
Type Ily Door (hinged left side) defeatable	**758308**	
Type Iln Door (hinged left side) not defeatable	**758309**	
Type Iry Door (hinged right side) defeatable	**758310**	
Type Irn Door (hinged right side) not defeatable	**758311**	
Frame sizes 50...70		
Type Iy Door defeatable	**760323**	
Type In Door not defeatable	**760324**	
Locking facility type wi Cradle provided with cylindrical lock against insertion of cranking handle (frame sizes 50...70)	**758312**	
Locking facility type we Mechanical interlock against insertion of cranking handle when circuit breaker is in ON position (frame sizes 50...70)	**758313**	

Accessories for circuit breaker		
Bowden wire interlock type g2 Mounting kit for mechanical interlock of 2 circuit breakers Supplementary provide an electrical interlock		
Frame size 10...40	**758314**	
Frame size 50...70	**758325**	
Extension rail		
For cradle frame sizes 50...70	**760326**	

Replacement parts

Contacts	Suitable for circuit breaker	Sets per pole	Ref. No.	kg
Set of main contacts (1)	ME637 to 1257 H, S1	1	**On request**	1.5
	ME1607 to 2507 H, S1	1	**On request**	2.1
	ME2507 H, S1	1	**On request**	2.9
	ME3207 H, S1	2	**On request**	4.2
	ME3207 H, S1/IV Neutral pole	1	**On request**	2.1
	ME4007 S	3	**On request**	0.6
	ME5007 S	4	**On request**	0.6
	ME6307 S	4	**On request**	0.2
Set of arcing contacts (1) applicable up to 690V AC and 750V DC	ME637 to1257 H, S1	1	**On request**	0.2
	ME1607 to 2507 H, S1	2	**On request**	0.2
	ME3207 H, S1	4	**On request**	0.2
	ME3207 H, S1/IV Neutral pole	2	**On request**	0.2
	ME4007 S	3	**On request**	0.2
	ME5007 to 6307 S	4	**On request**	0.2
Set of arcing contacts (1) applicable up to 1000V AC 1200V/1500V DC	ME637 to ME1257/H, MEG1257	1	Please refer to spare part catalogue	
	ME1607 to ME2007H, MEG2007	1		
	ME3207H, MEG3207	2		
	ME4007S, MEG4007	3		
	MEG50007S	4		
	MEG6307S	4		

Arc chutes	Suitable for circuit breaker	Pieces / pole	Ref. No.	kg
Arc chute without ceramic inserts, applicable up to 500V AC	ME637 to 1257 H, S1, N	1	**760608**	2.4
	ME1607 to 2007 H, S1, N	1	**760609**	2.6
	ME2507 H, S1, N	1	**760610**	3.7
	ME3207 H, S1, N	2	**760609**	2.6
	ME3207 H, S1/IV Neutral pole	1	**760609**	2.6
Arc chute with ceramic inserts, applicable up to 690V AC	ME637 to 1257 H, S1	1	**760575**	2.6
	ME1607 to 2007 H, S1	1	**760576**	2.8
	ME2507 H, S1	1	**760577**	3.9
	ME3207 H, S1	2	**760576**	2.8
	ME3207 H, S1/IV Neutral pole	1	**760576**	2.8
Arc chute applicable up to 690V AC	ME4007 S, ME4007S/IV	3	**758347**	2.0
	ME5007... 6307S	4	**758347**	2.0
Arc chute adaptor applicable up to 1000V AC, 1200V/1500V DC	ME637 to ME1257H, MEG1257	1	Please refer to spare part catalogue	
	ME1607 to ME2007H, MEG2007	1		
	ME3207H, MEG3207	2		
	ME4007S, MEG4007	3		
	MEG5007	4		
	MEG6307	4		
Arc chute heightend applicable up to 1000V AC, 1200V/1500V DC	ME637 to ME1257H, MEG1257	1	Please refer to spare part catalogue	
	ME1607 to ME2007H, MEG2007	1		
	ME3207H, MEG3207	2		
	ME4007, MEG4007	3		
	MEG5007S	4		
	MEG6307S	4		

(1) Set consists all fitting parts, e.g. fixed and movable contacts, contact springs and screws.

Notes

Type ME637 to ME6307

Trip units
type bse 3 - 1 rms to bse 3 - 5 rms
bse 4 - 1 rms to bse 4 - 5 rms

I_{CT} = primary current of the CT

Long time delay b
I_b = 0.40 to 1 x I_{CT}

Short time delay s

I_s = 1.5 to 14 x I_{CT}	I_{CT} = 250 to 1250A
I_s = 1.5 to 8 x I_{CT}	I_{CT} = 1600 to 2500A
I_s = 1.5 to 5 x I_{CT}	I_{CT} = 3200A
I_s = 1.5 to 4 x I_{CT}	I_{CT} = 4000A
I_s = 1.5 to 3 x I_{CT}	I_{CT} = 5000A
I_s = 1.5 to 3 x I_{CT}	I_{CT} = 6400A

Time delay for s-channel
t_s = 30 to 300 ms

Instantaneous k
(switchable on/off)

I_K = 18 x I_{CT}	I_{CT} = 250 . . 1250A
I_K = 10 x I_{CT}	I_{CT} = 1600 . . 2500A
I_K = 7 x I_{CT}	I_{CT} = 3200A
I_K = 10 x I_{CT}	I_{CT} = 4000A
I_K = 10 x I_{CT}	I_{CT} = 5000A
I_K = 10 x I_{CT}	I_{CT} = 6400A

Dynamical high speed short time trip unit ks,
except ME4007 to ME6307
Ks = value according to frame size (ME07 H)
(see technical values)

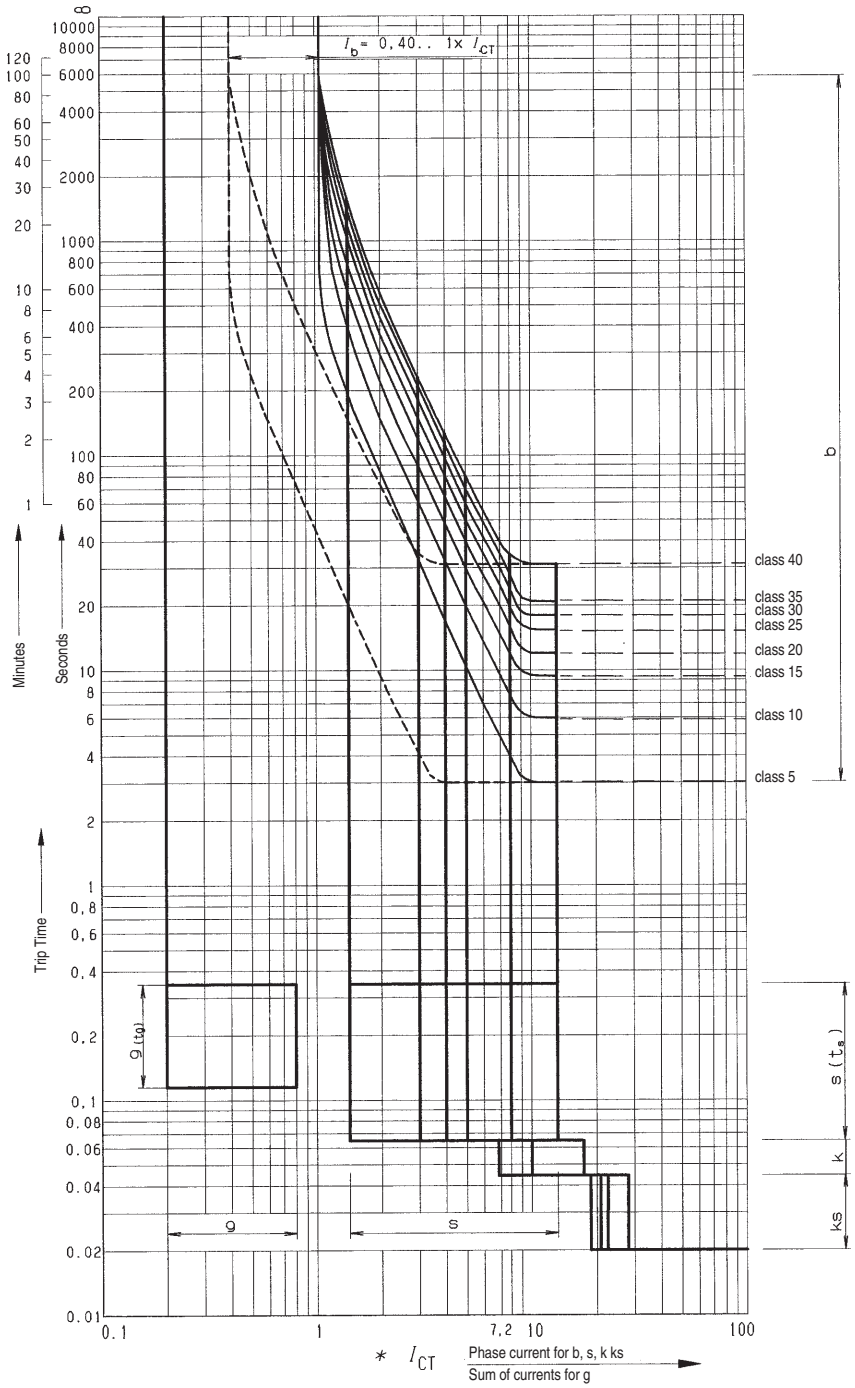
Ground fault g
(only bse 3/4 - 4 rms and bse 3/4 - 5 rms)
t_g = 100 to 300 ms

I_g = 0.2 to 0.8 x I_{CT}	I_{CT} = 250 to 6400A

Values for b-channel
Tripping class

X x current setting (Ib)	5	10	15	20	25	30	35	40
1.5	164	328	492	656	820	984	1148	1272
2	74	148	222	296	368	440	510	578
3	30	60	90	120	150	180	210	228
4	17	34	51	68	85	102	116	126
5	10	20	30	40	50	60	70	80
6	7	14	21	28	35	42	49	56
7.2	5	10	15	20	25	30	35	40
8	4	8	12	16	20	24	28	31
All times in seconds								

bse 3-1 rms and bse 4-2 rms: class 20 only
bse 4-1 rms and bse 4-2 rms: class 20 only



All curves from cold conditions.

Type ME637 to ME6307

Trip units
type bse 3 - 6 rms to bse 3 - 7 rms
bse 4 - 6 rms to bse 4 - 7 rms

I_{CT} = primary current of the CT

Long time delay b
I_b = 0.45 to 1 x I_{CT} bse 3-6 / 4-6 rms
I_b = 0.5 to 1 x I_{CT} bse 3-7 / 4-7 rms

Short time delay s
I_s = 1.5 to 14 x I_{CT} I_{CT} = 250 to 1250A
I_s = 1.5 to 8 x I_{CT} I_{CT} = 1600 to 2500A
I_s = 1.5 to 5 x I_{CT} I_{CT} = 3200A
I_s = 1.5 to 4 x I_{CT} I_{CT} = 4000A
I_s = 1.5 to 3 x I_{CT} I_{CT} = 5000A
I_s = 1.5 to 3 x I_{CT} I_{CT} = 6400A

Time delay for s-channel
t_s = 0 . . 300 ms

Instantaneous k
(switchable on/off)
I_K = 4 to 18 x I_{CT} I_{CT} = 250 to 1250A
I_K = 4 to 10 x I_{CT} I_{CT} = 1600 to 2500A
I_K = 4 to 7 x I_{CT} I_{CT} = 3200A
I_K = 4 to 10 x I_{CT} I_{CT} = 4000A
I_K = 4 to 10 x I_{CT} I_{CT} = 5000A
I_K = 4 to 10 x I_{CT} I_{CT} = 6400A

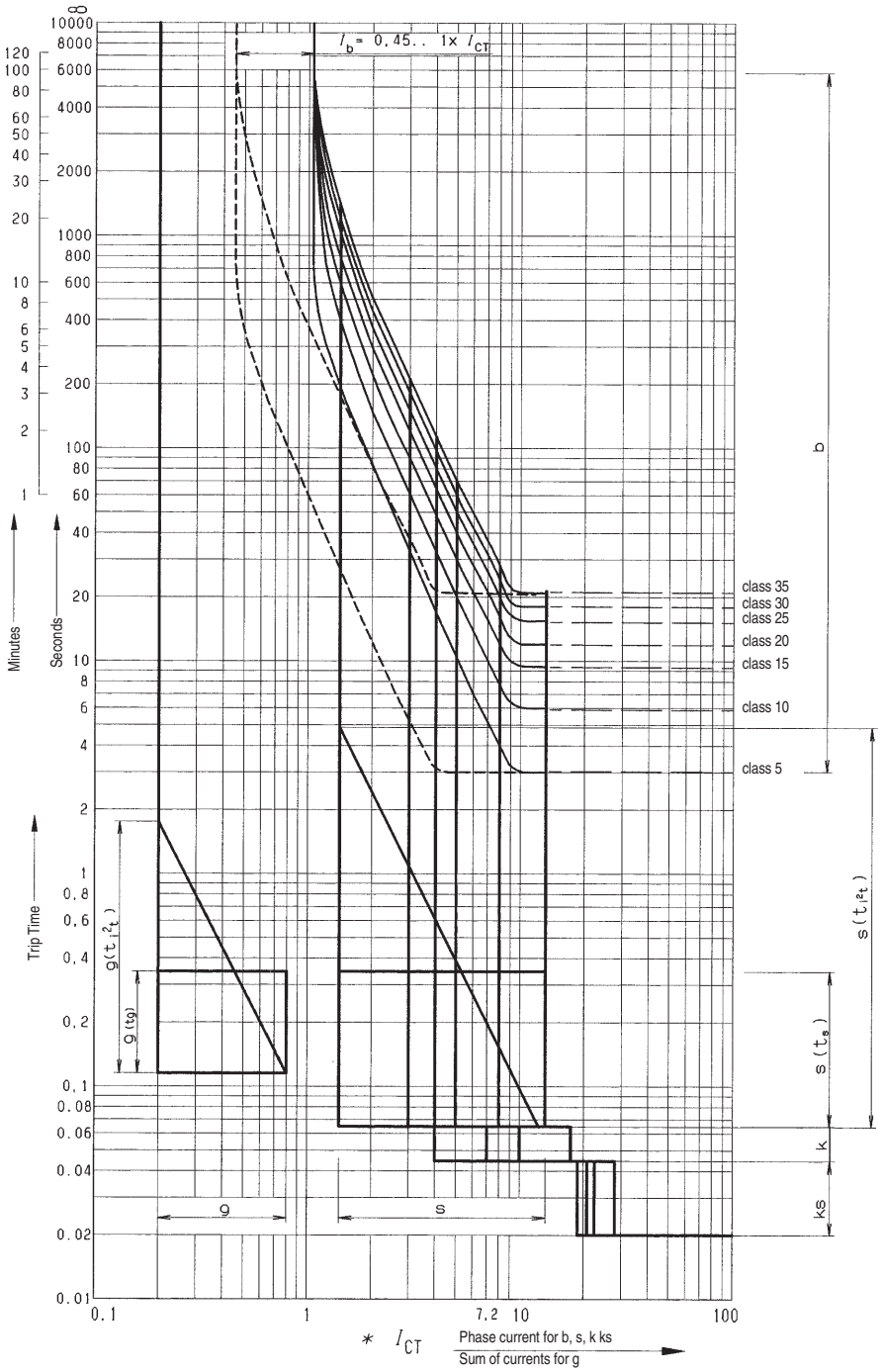
Dynamical high speed short time trip unit ks, except ME4007 to ME6307
ks = value according to frame size (see table technical values)

Ground fault g
t_g = 100 to 300 ms
I_g = 0.2 to 0.8 x I_{CT} I_{CT} = 250 to 6400A

Values for b-channel

Tripping class

X x current setting (I_b)	5	10	15	20	25	30	35
1.2	371	742	1113	1484	1855	2226	2597
1.5	164	328	492	656	820	984	1148
2	74	148	222	296	368	440	510
3	30	60	90	120	150	180	210
4	17	34	51	68	85	102	116
5	10	20	30	40	50	60	70
6	7	14	21	28	35	42	49
7.2	5	10	15	20	25	30	35
8	4	8	12	16	20	24	28
All times in seconds							



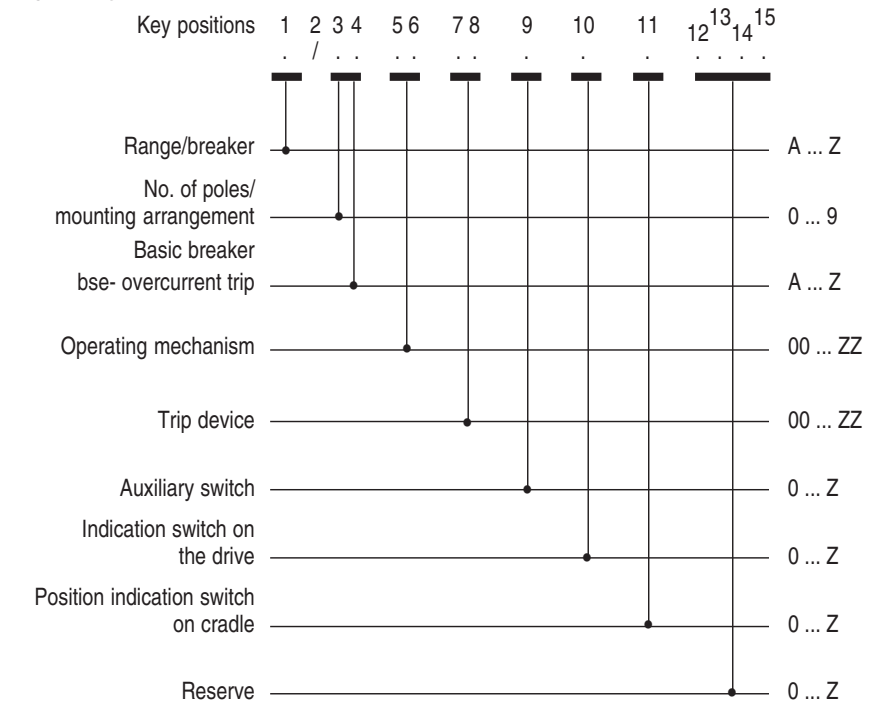
All curves from cold conditions.

Basic connections

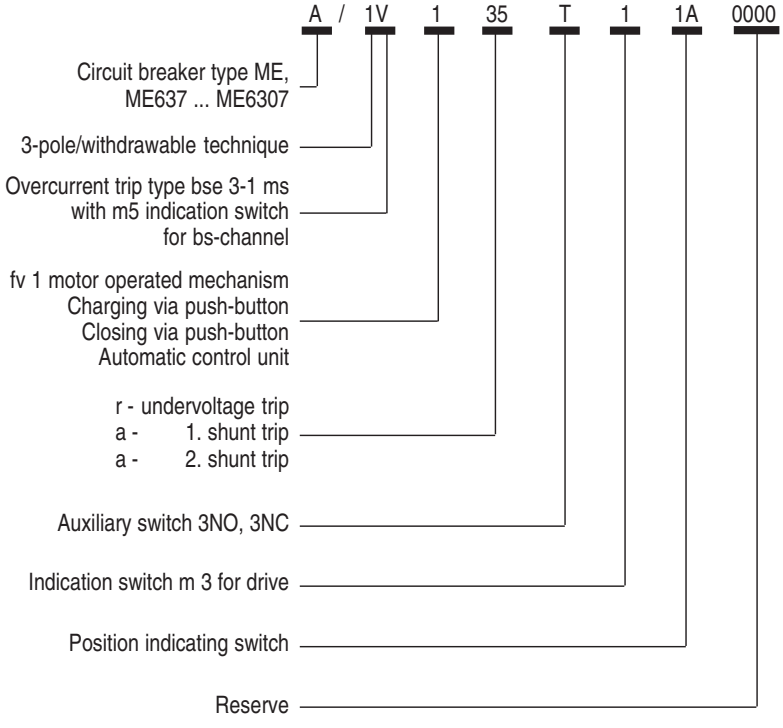
Definitions

The power circuit and the control part is presented as a typical circuit diagram. The overall control part is a combination of numbered basic diagrams for drives, trips and indicators. The number of the complete diagram can be derived by using the key numbers of the basic plan.

Diagram key



Example: Complete diagram



Basic connections

Definitions

Key no.	Abbre-viation	Current	Designation and application
Key position 1 and 2 - Breaker/range			
A			Circuit breaker type ME637N to ME3207N, frame size 10 to 40 Circuit breaker type ME637S1 to ME3207S1, frame size 10 to 40 Circuit breaker type ME4007S to ME6307S, frame size 50 to 70 Circuit breaker type ME637H to ME3207H, frame size 10 to 40
			Circuit breaker type ME637N/IV to ME2507N/IV, frame size 10/IV to 40/IV Circuit breaker type ME637S1/IV to ME3207S1/IV, frame size 10/IV to 40/IV Circuit breaker type ME4007S/IV, frame size 50/IV Circuit breaker type ME637H/IV to ME3207H/IV, frame size 10/IV to 40/IV Circuit breaker type MEG1257 to ME6307, frame size 10 to 70
Key position 3 - No. of poles/mounting arrangement			
0 1			Circuit breaker 3-pole stationary mounting with/without electronic trip unit 3-pole, frame size 10 to 60 Circuit breaker 3-pole withdrawable version with/without electronic trip unit 3-pole, frame size 10 to 40
2 3			Circuit breaker 4-pole stationary mounting with/without electronic trip unit 3-pole, frame size 10 to 50 Circuit breaker 4-pole withdrawable version with/without electronic trip unit 3-pole, frame size 10 to 40
4 5			Circuit breaker 4-pole stationary mounting with electronic trip unit 4-pole, frame size 10 to 40 Circuit breaker 4-pole withdrawable version with electronic trip unit 4-pole, frame size 10 to 40
6 7 8 G			Circuit breaker 3-pole withdrawable version without electronic trip unit 3-pole, frame size 50 to 70 Circuit breaker 4-pole withdrawable version with/without electronic trip unit 3-pole, frame size 50 Circuit breaker 4-pole withdrawable version with electronic trip unit 4-pole, frame size 50 DC - circuit breaker, stationary mounting
Key position 4 - Electronic trip unit			
A			Circuit breaker without electronic trip unit (Disconnecting switch)
U V			Circuit breaker with electronic trip unit type bse 3-1 rms/bse 4-1 rms Circuit breaker with electronic trip unit type bse 3-1 rms/bse 4-1 rms and trip indication bs-channel m5
W X			Circuit breaker with electronic trip unit type bse 3-2 rms/bse 4-2 rms Circuit breaker with electronic trip unit type bse 3-2 rms/bse 4-2 rms and trip indication bs-channel m5
S			Circuit breaker with electronic trip unit type bse 3-3 rms/bse 4-3 rms
T			Circuit breaker with electronic trip unit type bse 3-3.1 rms/bse 4-3.1 rms
L			Circuit breaker with electronic trip unit type bse 3-4 rms/bse 4-4 rms
N			Circuit breaker with electronic trip unit type bse 3-5 rms/bse 4-5 rms
P			Circuit breaker with electronic trip unit type bse 3-6 rms/bse 4-6 rms
R			Circuit breaker with electronic trip unit type bse 3-7 rms/bse 4-7 rms
Key position 4 - DC overcurrent release			
A 1			Circuit breaker without overcurrent release (Disconnecting switch) Circuit breaker with overcurrent release

Basic connections

Definitions

Key no.	Abbre-viation	Current	Designation and application
Key position 5 and 6 - Operating mechanism			
10	x2		Hand operated mechanism with storage Charging mechanically, closing by push-button
1Z	xv		Hand operated mechanism Charging mechanically
		AC	Closing by push-button or electrically with closing coil
1Y	xv		Hand operated mechanism Charging mechanically
		DC	Closing by-push button or electrically with closing coil
D5 D0 A5 A0	fv 1	f, su, v - AC	Motor operated mechanism with storage and automatic control unit Separate command for **pre-charging** and closing Closing by push-button or electrically with closing coil
E5 E0 B5 B0		f, su, v - DC ≤ 60V	
F5 F0 C5 C0		f, su, v - DC > 60V	
M5 M0 G5 G0		f, su - AC, v - AC	
N5 N0 H5 H0		f, su - AC, v - DC	
O5 O0 I5 I0		f, su - DC ≤ 60V, v - DC	
P5 PO J5 J0		f, su - DC > 60V, v - DC	
Q5 Q0 K5 K0		f, su - DC ≤ 60V, v - AC	
R5 R0 L5 L0		f, su - DC > 60V, v - AC	
D6 D1 A6 A1	fv 2	f, su, v - AC	Motor operated mechanism with storage and automatic control unit Automatic **pre-charging** after OFF Closing by push-button or electrically with closing coil
E6 E1 B6 B1		f, su, v - DC < 60V	
F6 F1 C6 C1		f, su, v - DC > 60V	
M6 M1 G6 G1		f, su - AC, v - AC	
N6 N1 H6 H1		f, su - AC, v - DC	
O6 O1 I6 I1		f, su - DC ≤ 60V, v - DC	
P6 P1 J6 J1		f, su - DC > 60V, v - DC	
Q6 Q1 K6 K1		f, su - DC ≤ 60V, v - AC	
R6 R1 L6 L1		f, su - DC > 60V, v - AC	
D7 D2 A7 A2	fv 3.1	f, su, v - AC	Motor operated mechanism with storage and automatic control unit Automatic **pre-charging** after ON with manual **first-charging** Closing by push-button or electrically with closing coil
E7 E2 B7 B2		f, su, v - DC ≤ 60V	
F7 F2 C7 C2		f, su, v - DC > 60V	
M7 M2 G7 G2		f, su - AC, v - AC	
N7 N2 H7 H2		f, su - AC, v - DC	
O7 O2 I7 I2		f, su - DC ≤ 60V, V - DC	
P7 P2 J7 J2		f, su - DC > 60V, v - DC	
Q7 Q2 K7 K2		f, su - DC ≤ 60V, v - AC	
R7 R2 L7 L2		f, su - DC > 60V, v - AC	
D8 D3 A8 A3	fv 3.2	f, su, v - AC	Motor operated mechanism with storage and automatic control unit Automatic **pre-charging** after ON and automatic **first-charging** Closing by push-button or electrically with closing coil
E8 E3 B8 B3		f, su, v - DC ≤ 60V	
F8 F3 C8 C3		f, su, v - DC > 60V	
M8 M3 G8 G3		f, su - AC, v - AC	
N8 N3 H8 H3		f, su - AC, v - DC	
O8 O3 I8 I3		f, su - DC ≤ 60V, v - DC	
P8 P3 J8 J3		f, su - DC > 60V, v - DC	
Q8 Q3 K8 K3		f, su - DC ≤ 60V, v - AC	
R8 R3 L8 L3		f, su - DC > 60V, v - AC	
– – A9 A4	fv 4	f, su, v - AC	Motor operated mechanism with storage and automatic control unit Automatic ON after **pre-charging** Indication “Spring energy system charged” not available
– – B9 B4		f, su, v - DC ≤ 60V	
– – C9 C4		f, su, v - DC > 60V	
– – G9 G4		f, su - AC, v - AC	
– – H9 H4		f, su - AC, v - DC	
– – I9 I4		f, su - DC ≤ 60V, v - DC	
– – J9 J4		f, su - DC > 60V, v - DC	
– – K9 K4		f, su - DC ≤ 60V, v - AC	
– – L9 L4		f, su - DC > 60V, v - AC	
X X – –	signal contact untied potential		Operating mechanism
– – X X	signal contact tied potential		Indication “Spring energy system charged”
– X – X	ME637/III to 2507/III, ME4007S/III to 6307S/III		Frame size
X – X –	ME637/IV to 4007/IV; ME3207/III		
S0	bse 3-7/4-7 rms	v - AC, hand operated	Frame size 10-30
S1		v - DC, hand operated	Frame size 10-30
S2		f, v - AC	Frame size 10-30
S3		f, v - DC	Frame size 10-30
S4		f - AC, v - DC	Frame size 10-30
S5		f - DC, v - AC	Frame size 10-30
S6		f, v - AC	Frame size 40-60
S7		f, v - DC	Frame size 40-60

f = Motor for operating mechanism su = automatic control unit v = closing coil

Basic connections

Definitions

Key no.	Abbre-viation	Current	Designation and application
Key position 7 and 8 - Auxiliary trips			
00			Without auxiliary trip for hand- or motor-operated mechanism
21	a	AC	1. Shunt trip for hand- or motor-operated mechanism
22	a	DC	1. Shunt trip for hand- or motor-operated mechanism
23	a a	AC AC	1. Shunt trip for hand- or motor-operated mechanism 2. Shunt trip for hand- or motor-operated mechanism
24	a	DC DC	1. Shunt trip for hand- or motor-operated mechanism 2. Shunt trip for hand- or motor-operated mechanism
25	a a	AC DC	1. Shunt trip for hand- or motor-operated mechanism 2. Shunt trip for hand- or motor-operated mechanism
26	a a	DC AC	1. Shunt trip for hand- or motor-operated mechanism 2. Shunt trip for hand- or motor-operated mechanism
31	a r	AC AC	1. Shunt trip for hand- or motor-operated mechanism Undervoltage trip for hand- or motor-operated mechanism
71	r	AC	Undervoltage trip for hand- or motor-operated mechanism
72	r	DC	Undervoltage trip for hand- or motor-operated mechanism
73	c	AC	Electrical delayed undervoltage trip without transformer
A0	n2	AC/DC	2. Shunt trip with capacitor trip unit
			All possible combinations of shunt and undervoltage trips on request

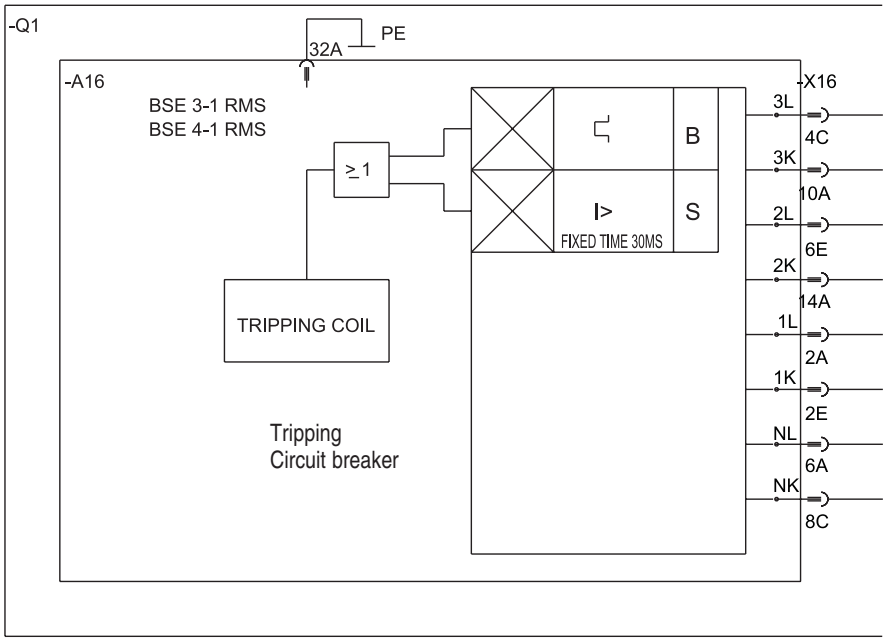
Key position 9 - Auxiliary contacts							
Key no.			Frame size	Breaker type	Plug no.	bse type	Aux. contacts
Z			10-40	fixed/withdr.	X1/X2	3-1/3-2	5NO 6NC
X			10-40	fixed/withdr.	X1/X2	3-3	5NO 5NC
V			10-40	fixed/withdr.	X1/X2	3-3.1/3-4/3-5	4NO 4NC
U			10-40	fixed/withdr.	X1/X2	3-6	3NO 4NC
C			50-60	fixed	X1/X2	3-1/3-2	5NO 6NC
D			50-60	fixed	X1/X2	3-3	5NO 5NC
E			50-60	fixed	X1/X2	3-3.1/3-4/3-5	4NO 4NC
F			50-60	fixed	X1/X2	3-6	3NO 4NC
G			50-70	withdr.	X20	3-1/3-2	5NO 6NC
H			50-70	withdr.	X20	3-3	5NO 5NC
J			50-70	withdr.	X20	3-3.1/3-4/3-5	4NO 4NC
K			50-70	withdr.	X20	3-6	3NO 4NC

Key position 10 - Indication switch on operating mechanism			
0			without signalling
1	m3		Signal “Spring energy storage system charged” for hand- and motor-operated mechanism
2	m4		Signal “Breaker ready for closure for hand- and motor-operated mechanism
3	m3+m4		Key number 1 + 2
Key position 11 - Position indication switch on cradle - ME637 to ME3207			
00			without signalling
11			1 indication switch 1CO - signal **connected**
12			1 indication switch 1CO - signal **test**
13			1 indication switch 1CO - signal **disconnected**
1A			3 indication switches 1CO - signal **connected - test- disconnected** (1 in each position)
1Y			6 indication switches 1CO - signal **connected - test- disconnected** (2 in each position)
Key position 11 - Position indication switch on cradle - ME4007 to ME6307			
00			without signalling
31			1 indication switch 2NC, 2NO - signal **connected**
32			1 indication switch 2NC, 2NO - signal **test**
33			1 indication switch 2NC, 2NO - signal **disconnected**
3A			3 indication switches 2NC, 2NO - signal **connected - test- disconnected** (1 in each position)

ME 637...3207, ME 4007...ME 6307

Key position 4
Electronic trip unit type bse 3-1 rms / bse 4-1 rms

U

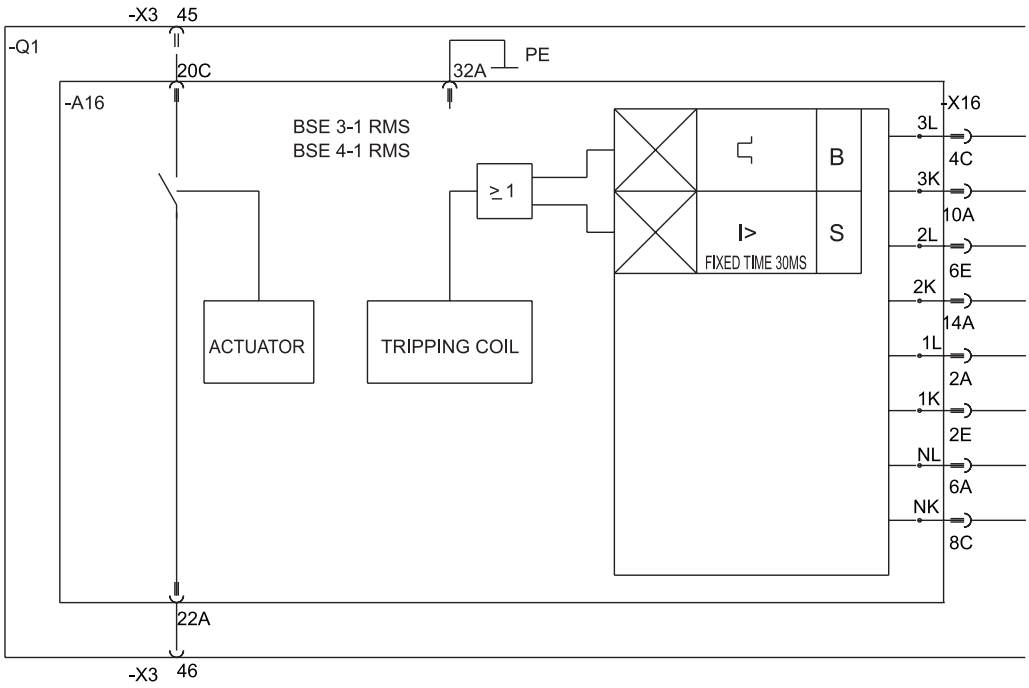


Internal current transformer see diagram N°. 229 917 (2)

Only for BSE 4-1 RMS

Key position 4
Electronic trip unit type bse 3-1 rms / bse 4-1 rms

V



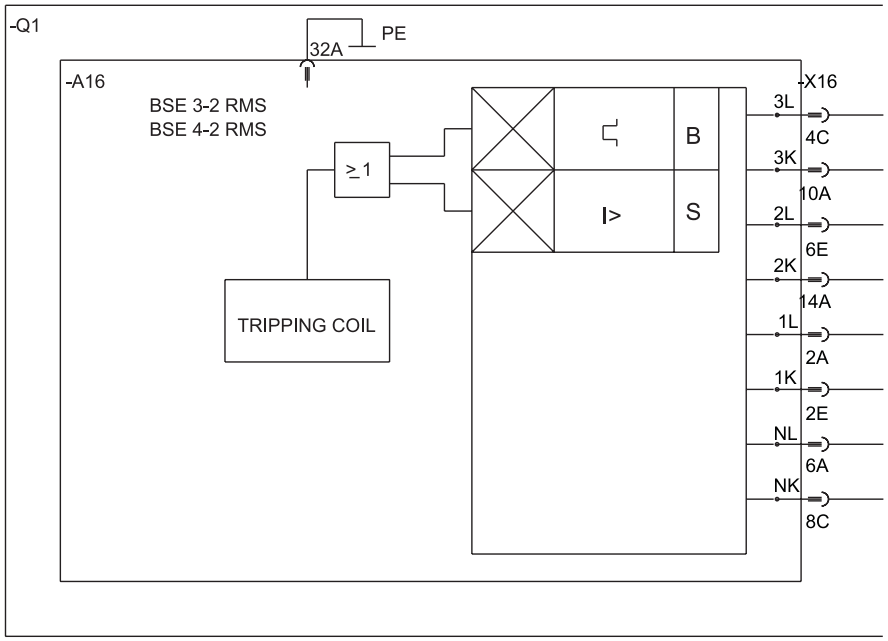
Internal current transformer see diagram N°. 229 917 (2)

Only for BSE 4-1 RMS

ME 637...3207, ME 4007...ME 6307

Key position 4
Electronic trip unit type bse 3-2 rms / bse 4-2 rms

W

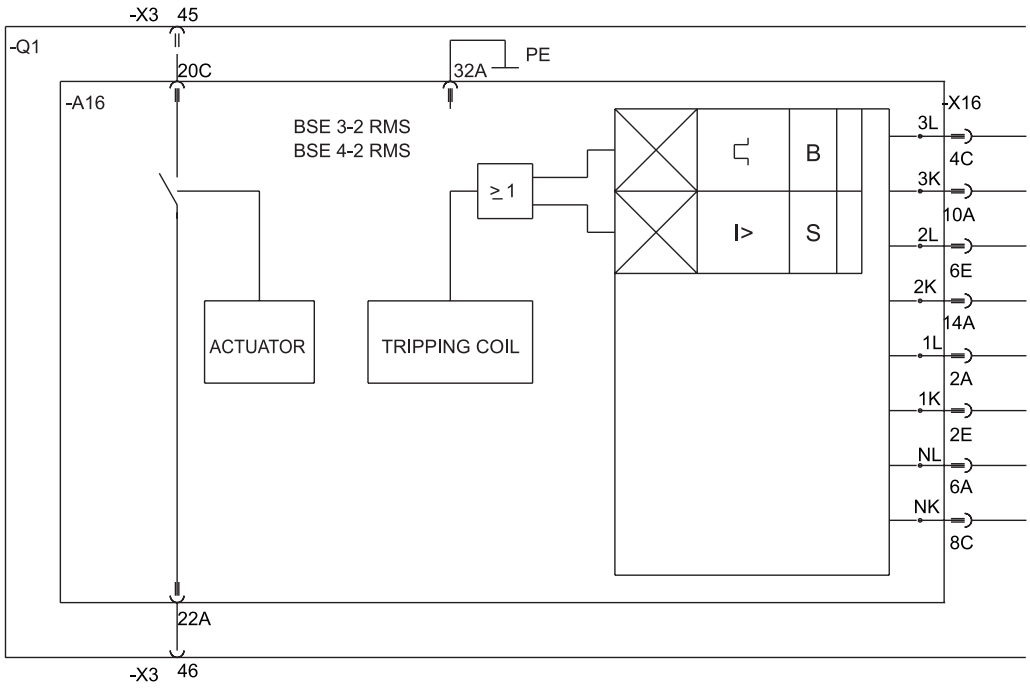


Internal current transformer
see diagram
N°. 229 917 (2)

Only for BSE 4-2 RMS

Key position 4
Electronic trip unit type bse 3-2 rms / bse 4-2 rms

X



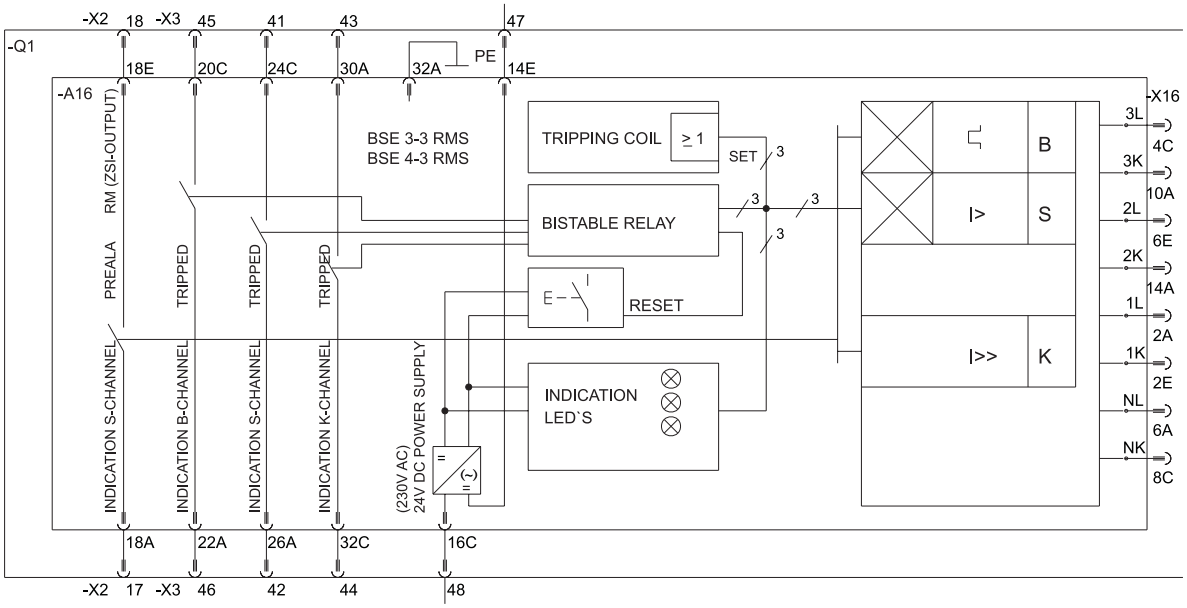
Internal current transformer
see diagram
N°. 229 917 (2)

Only for BSE 4-2 RMS

ME 637...3207, ME 4007...ME 6307

Key position 4
Electronic trip unit type bse 3-3 rms / bse 4-3 rms

S

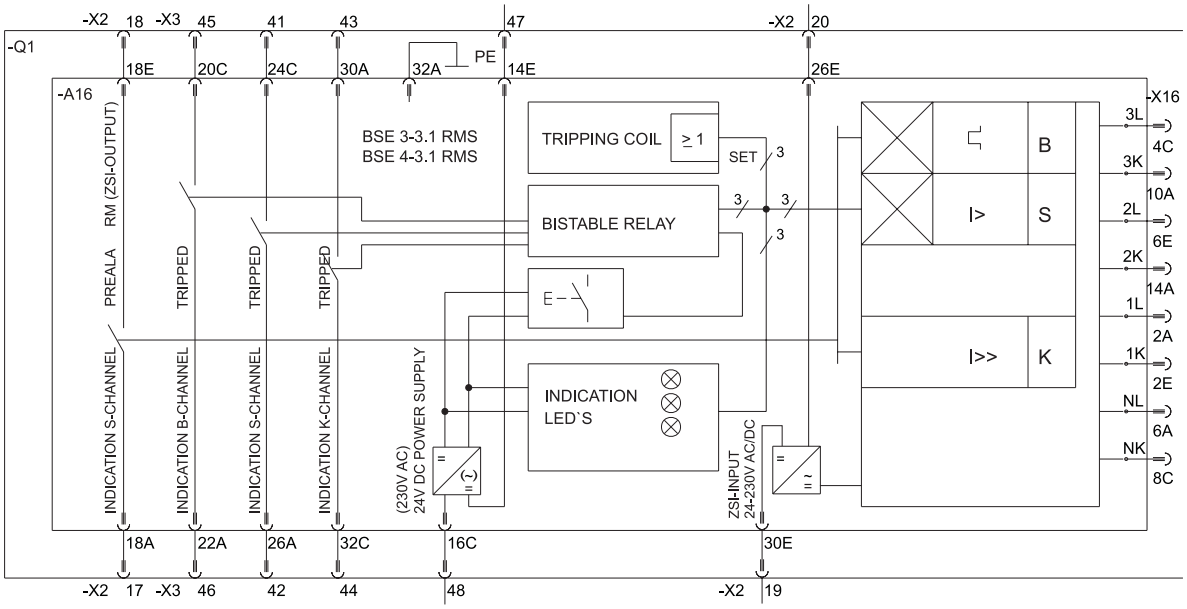


Internal current transformer see diagram N° 229 917 (2)

Only for BSE 4-3 RMS

Key position 4
Electronic trip unit type bse 3-3.1 rms / bse 4-3.1 rms

T



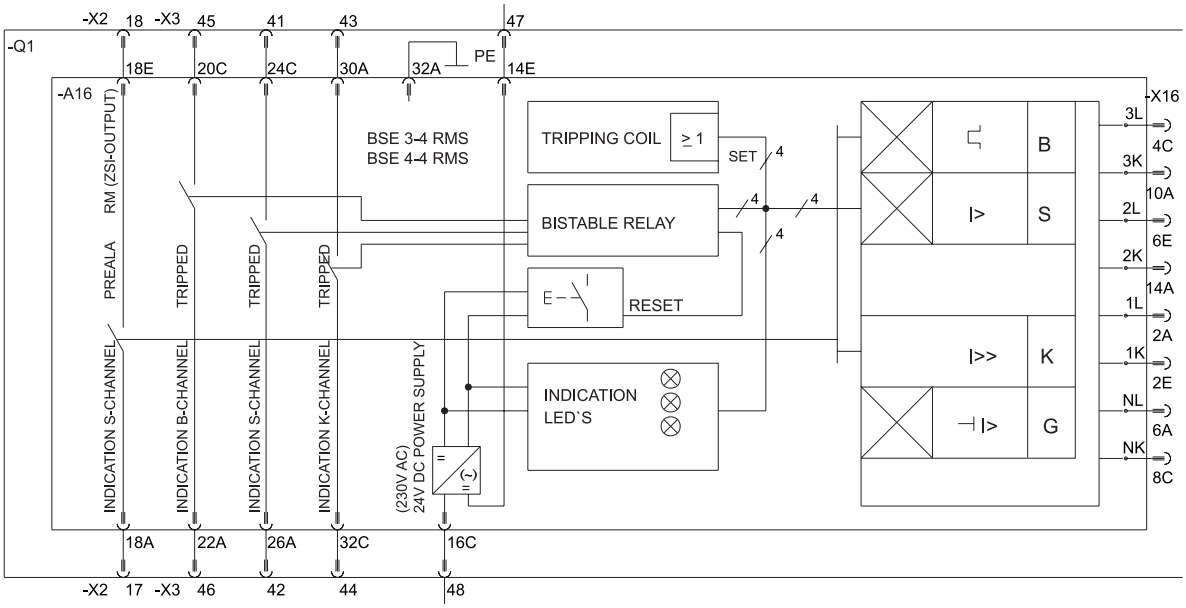
Internal current transformer see diagram N° 229 917 (2)

Only for BSE 4-3.1 RMS

ME 637...3207, ME4007...ME6307

Key position 4
Electronic trip unit type bse 3-4 rms / bse 4-4 rms

L

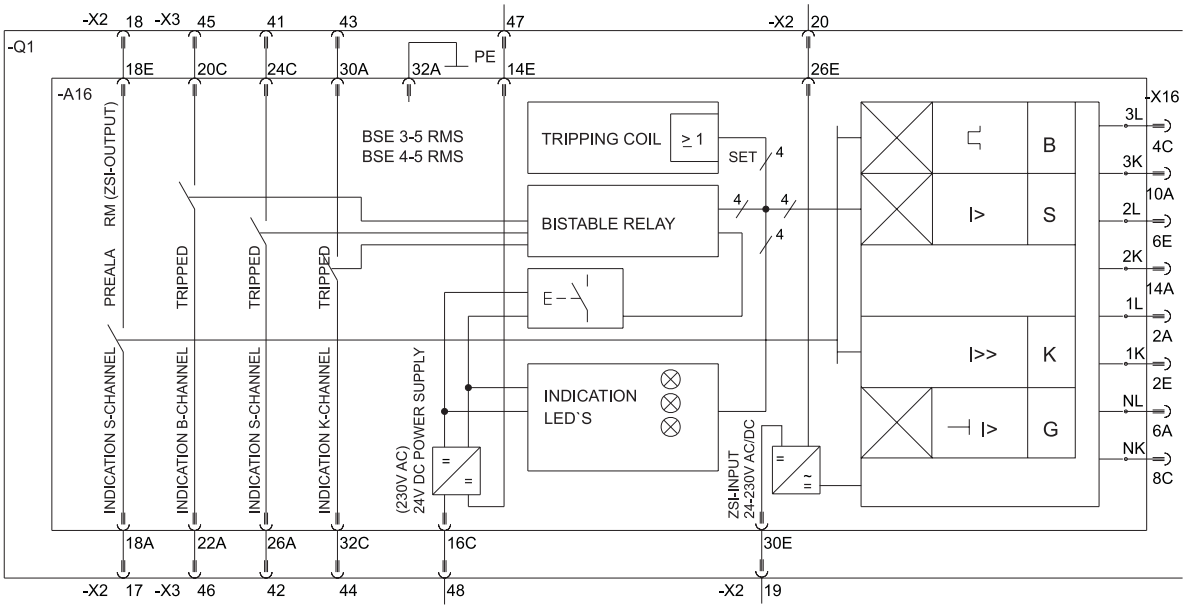


Internal current transformer see diagram N° 229 917 (2)

Only for BSE 4-4 RMS

Key position 4
Electronic trip unit type bse 3-5 rms / bse 4-5 rms

N



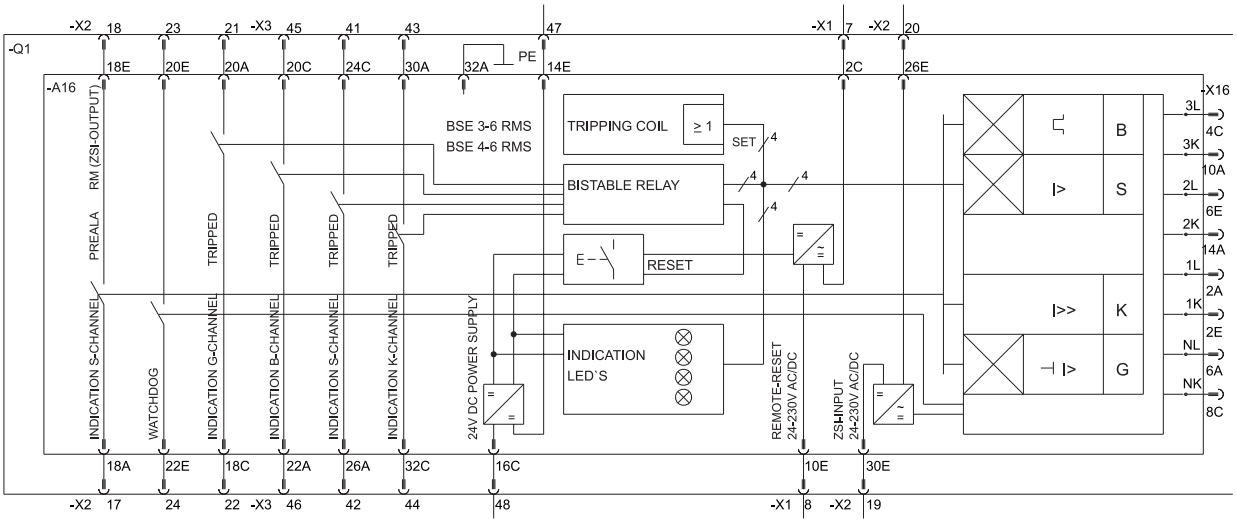
Internal current transformer see diagram N° 229 917 (2)

Only for BSE 4-5 RMS

ME 637...3207, ME 4007...ME 6307

P

Key position 4
Electronic trip unit type bse 3-6 rms / bse 4-6 rms

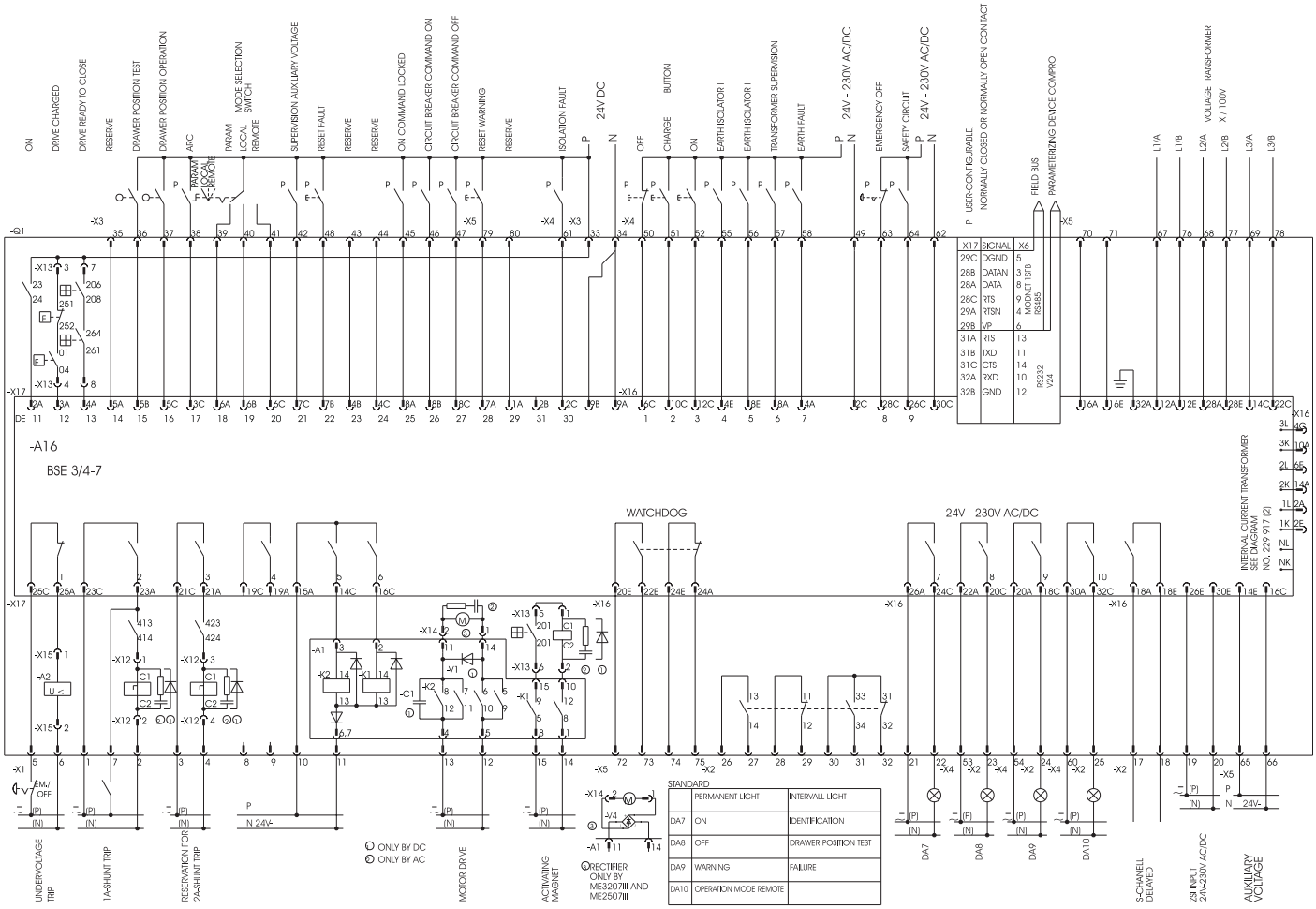


Internal current transformer see diagram N°. 229 917 (2)

Only BSE 4-6 RMS

R

Key position 4
Electronic trip unit type bse 3-7 rms / bse 4-7 rms



ME 637...3207
Key positions 5 and 6
Operating mechanism

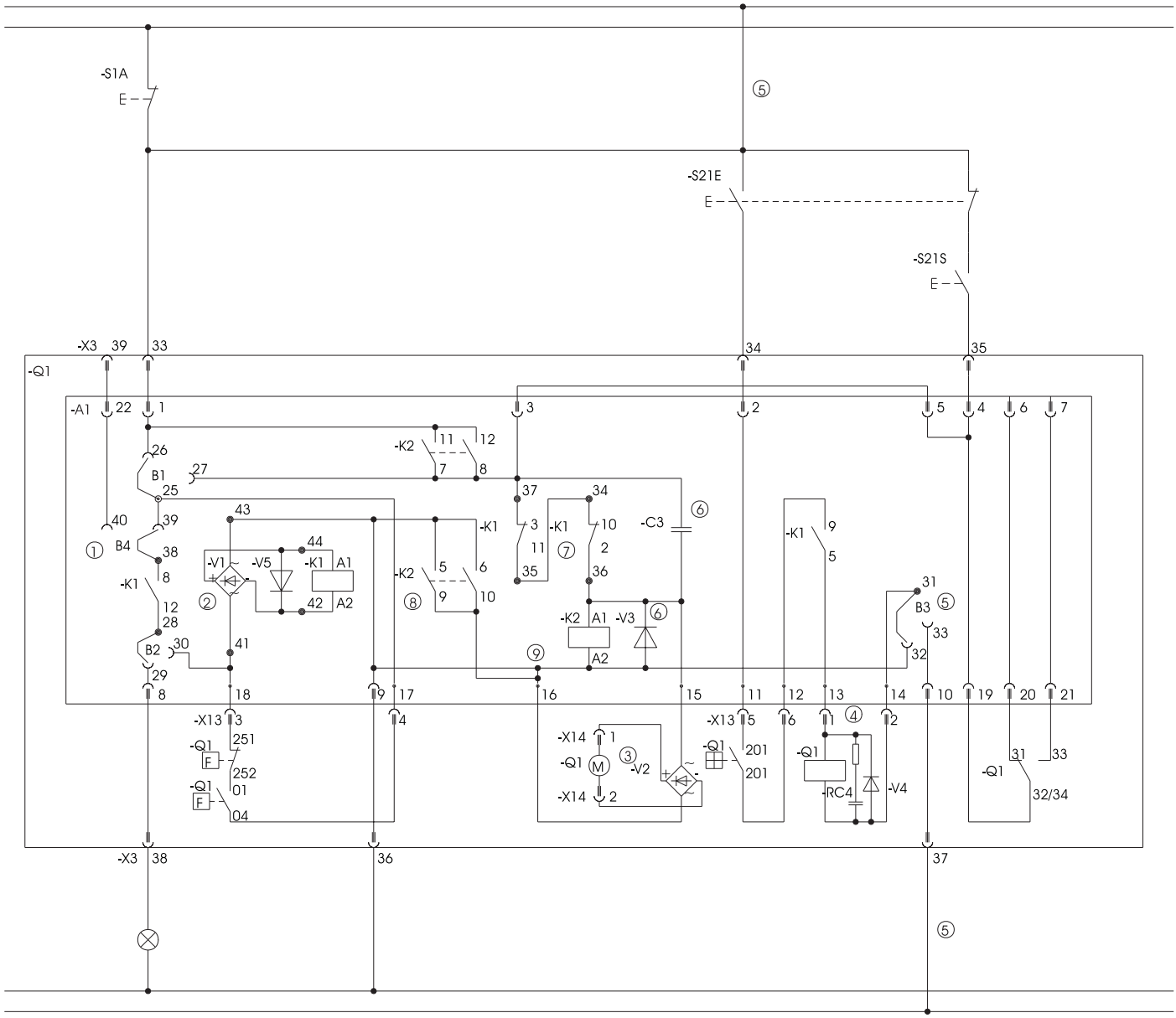


Fig. A/FV1

Fig. A ... E
Motor operated stored energy operating mechanism

① Bridge B4 - untied potential contact make connection from terminal 38 to 40
② Rectifier omitted at DC
(ⓕ protection circuitry)
③ Rectifier for type ME 3207 3-pole and type ME 2507 4-pole, otherwise motor connection directly
④ RC-circuitry at AC, diode at DC
⑤ Bridge B3 - for separate voltage for activation magnet, make connection terminal 31 and terminal 33 and connect pushbutton S21 to corresponding voltage
⑥ For DC only
⑦ For <= DC 60V connect the contacts in parallel i.e. link the terminals 34-37 and 35-36

These items are being considered by the manufacturer on corresponding request.

ME 637...3207
Key positions 5 and 6
Operating mechanism

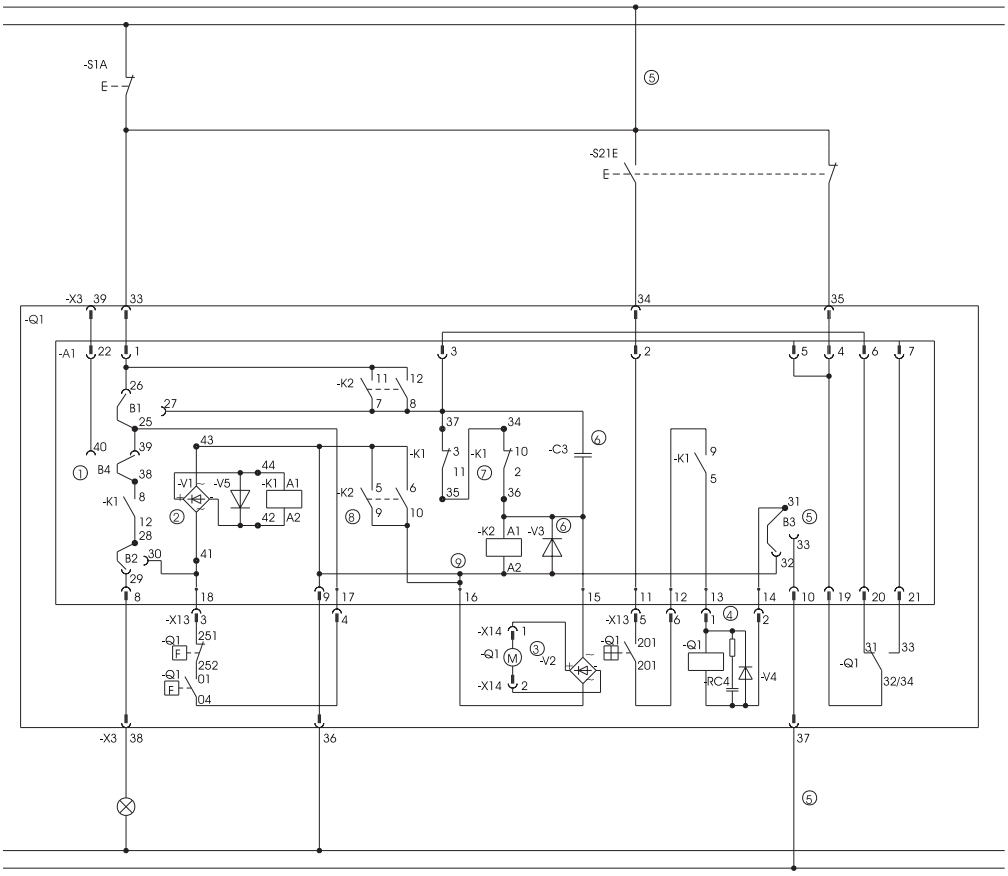


Fig. B / FV2

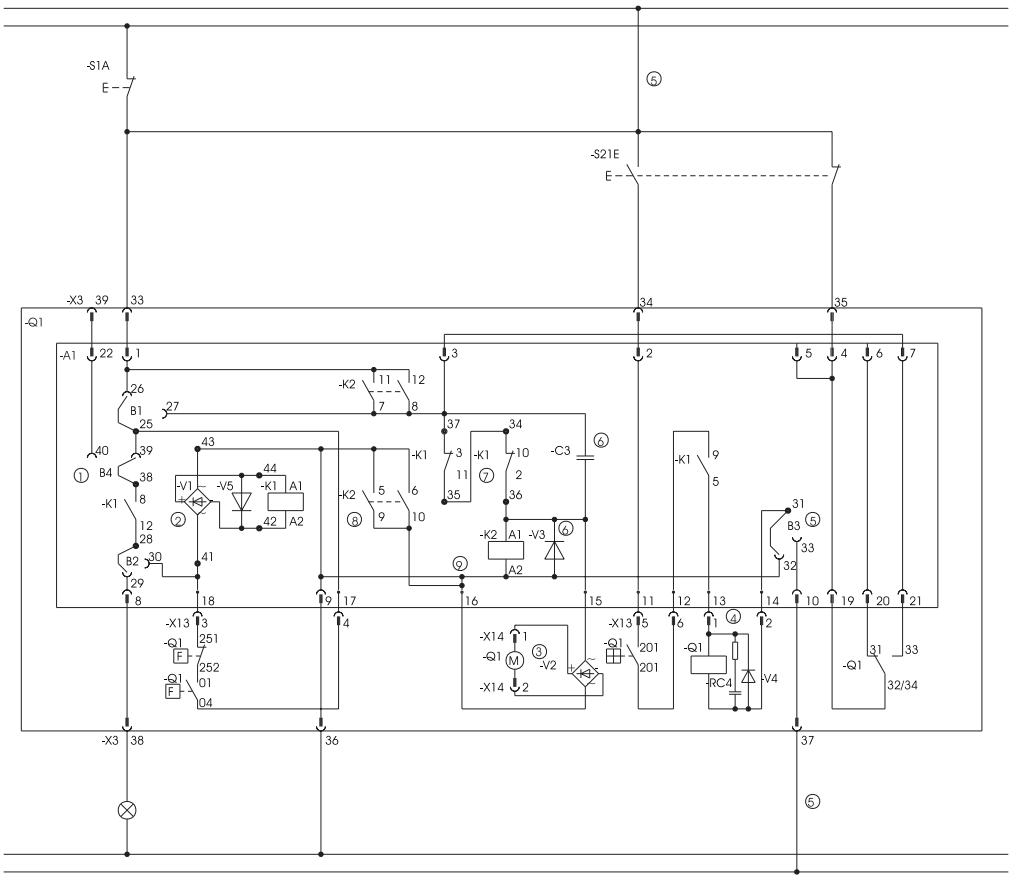


Fig. C / FV3.1

ME 637...3207
Key positions 5 and 6
Operating mechanism

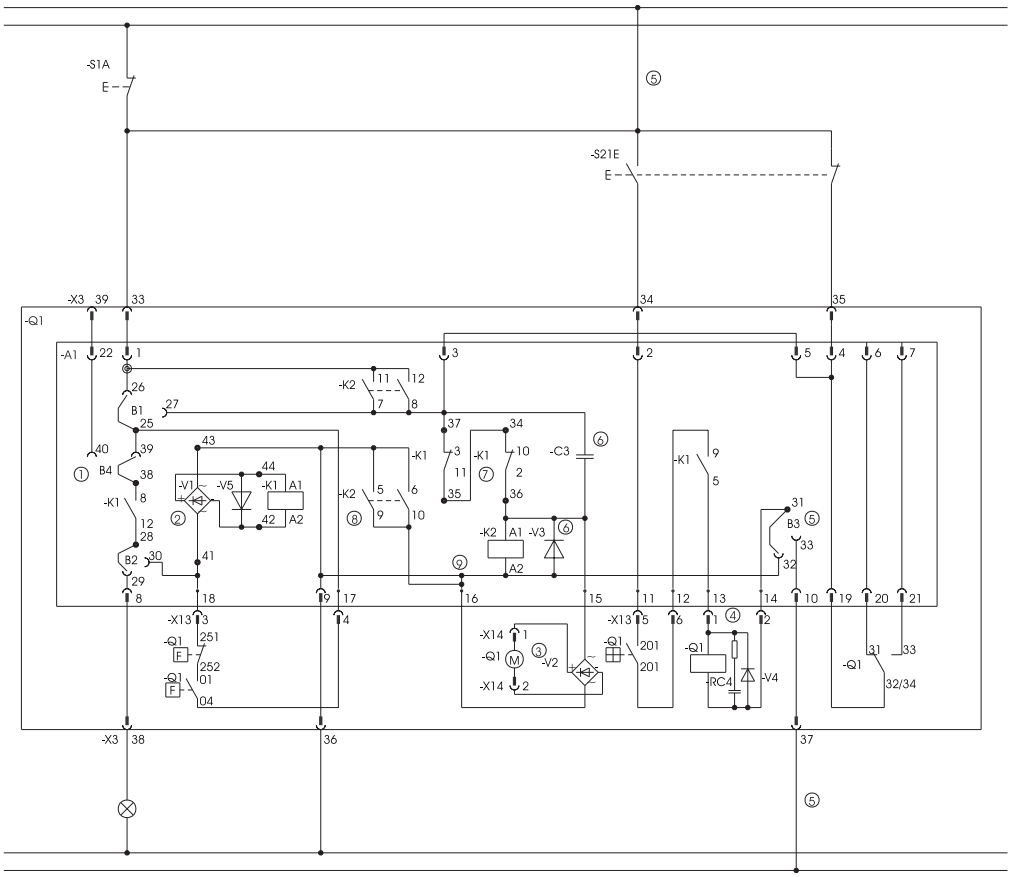


Fig. D / FV3.2

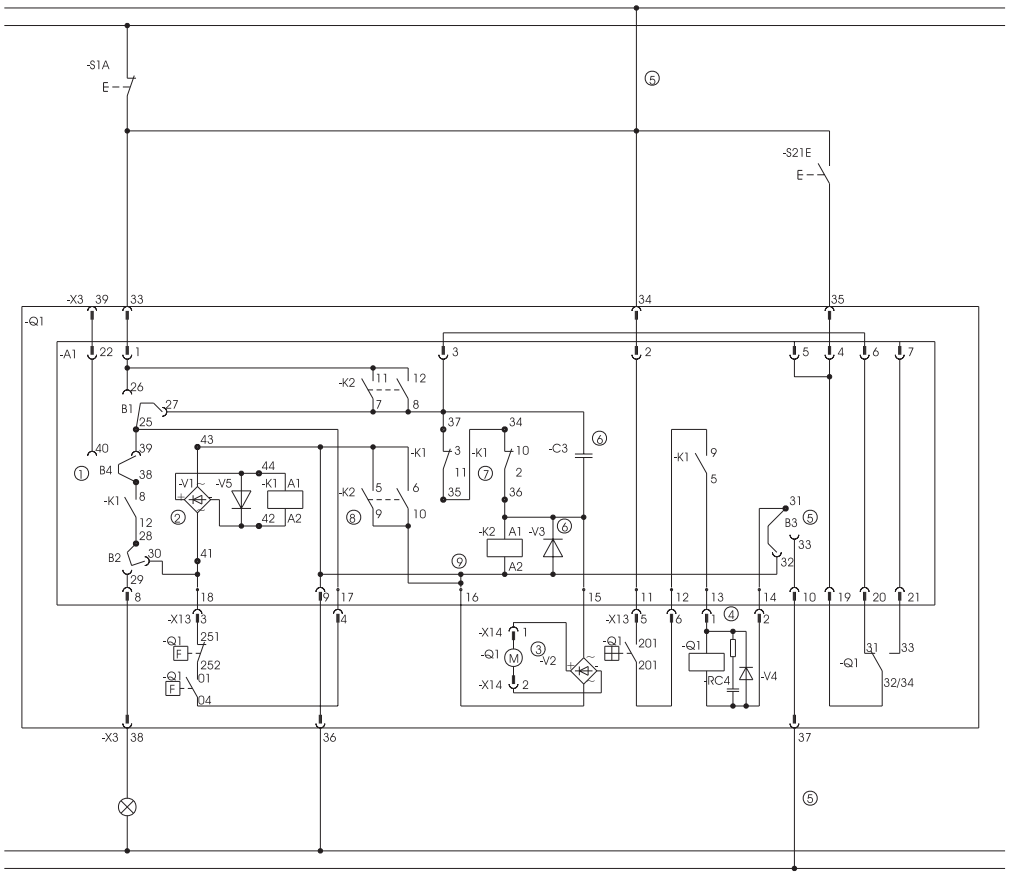
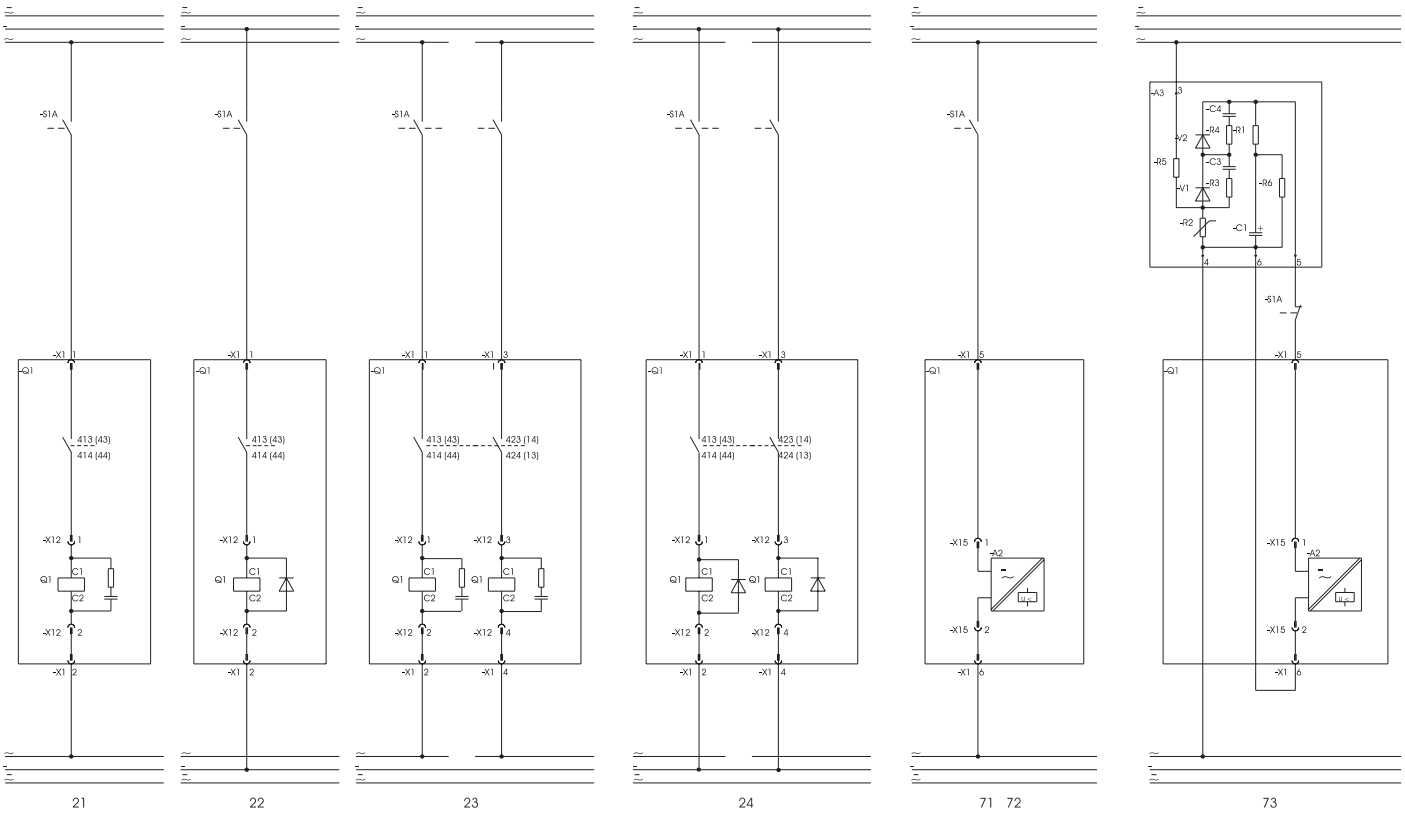
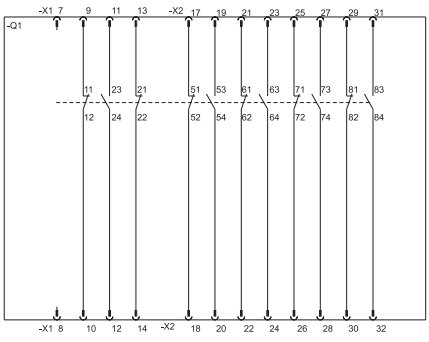


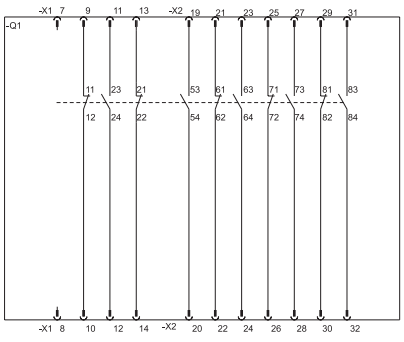
Fig. E / FV4

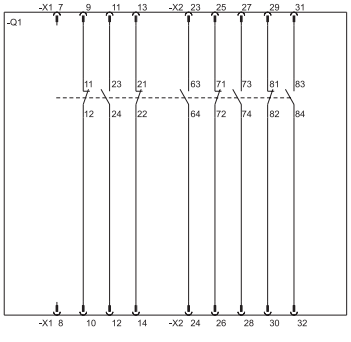
ME 637...3207
Key positions 7 and 8
Release

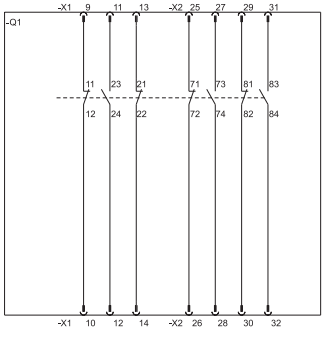


Key position 9
Auxiliary switch



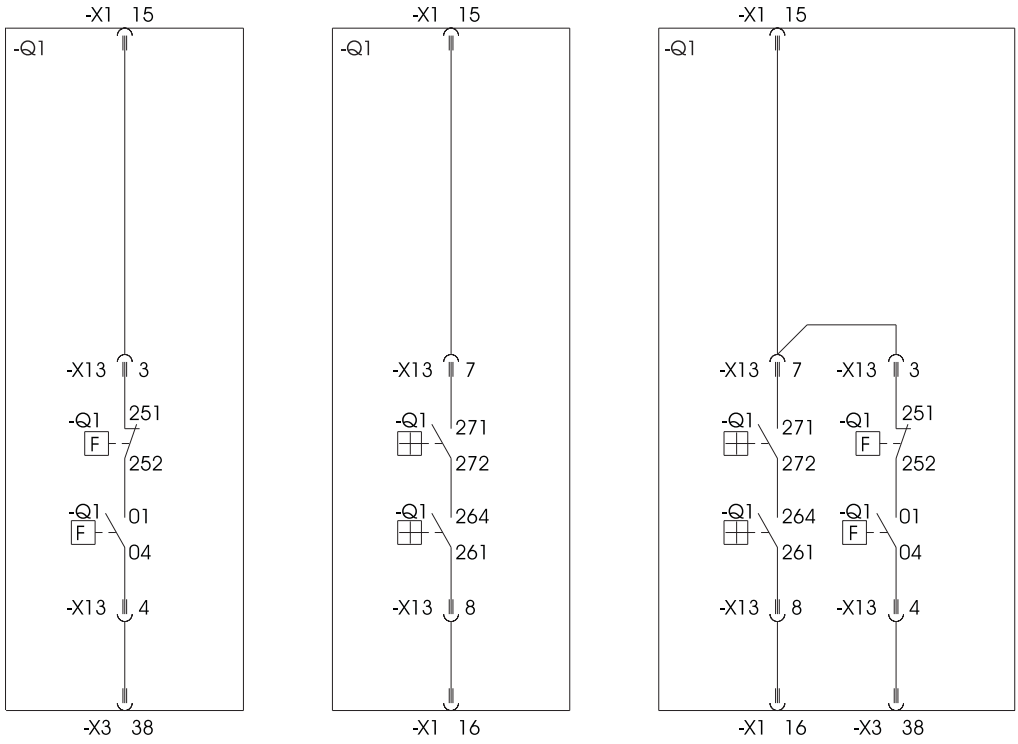




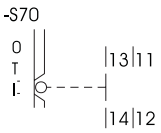


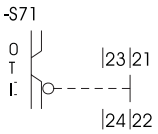
ME 637...3207

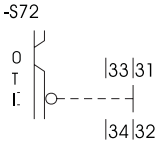
Key position 10
Signal switch at operating mechanism overcurrent release



Key positions 11 and 12
Position indication switch at plug-in unit carrier
(for further key numbers refer to handling instruction 'withdrawable technique')







0 = isolation position
T = test position
[= operation position

ME 4007...6307
Key positions 5 and 6
Operating mechanism

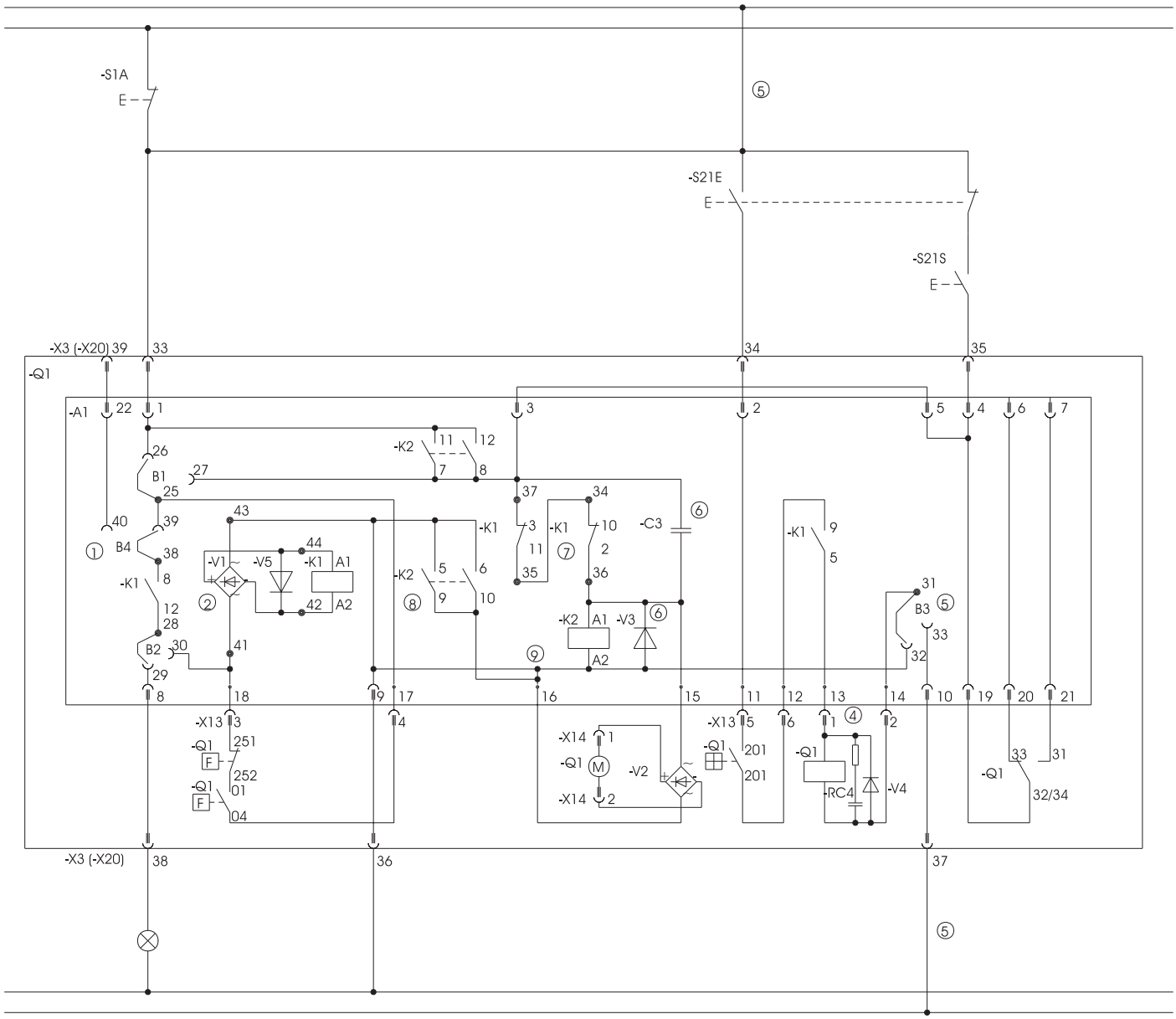


Fig. A/FV1

Fig. A ... E
Motor operated stored energy operating mechanism

① Bridge B4 - untied potential contact make connection from terminal 38 to 40
② Rectifier omitted at DC
(Ⓣ protection circuitry)
③ Rectifier for type ME 3207 3-pole and type ME 2507 4-pole, otherwise motor connection directly
④ RC-circuitry at AC, diode at DC
⑤ Bridge B3 - for separate voltage for activation magnet, make connection terminal 31 and terminal 33 and connect pushbutton S21 to corresponding voltage
⑥ For DC only
⑦ For <= DC 60V connect the contacts in parallel i.e. link the terminals 34-37 and 35-36
⑧ K2 contact 5-9 / 6-10 between Motor and N/PE at <= 48V
⑨ Cancelled at <= 48V

These items are being considered by the manufacturer on corresponding request.
At withdrawable technique X20=X1=X2=X3

ME 4007...6207
Key positions 5 and 6
Operating mechanism

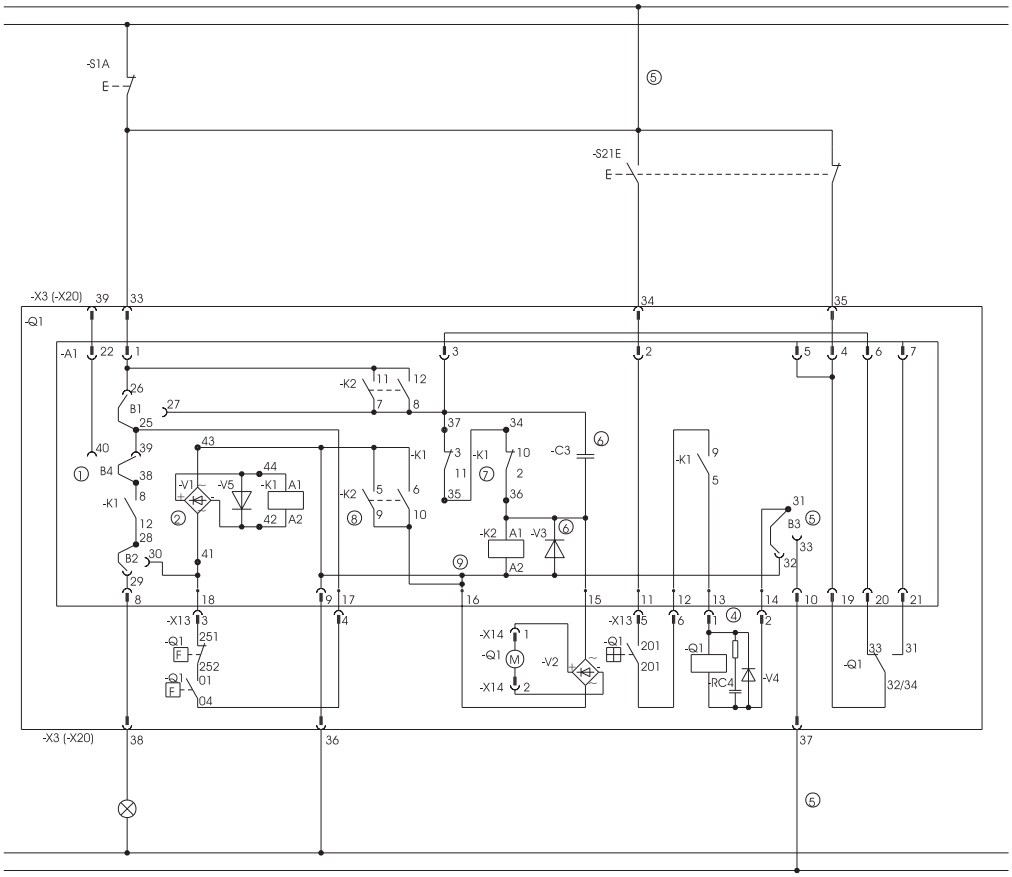


Fig. B / FV2

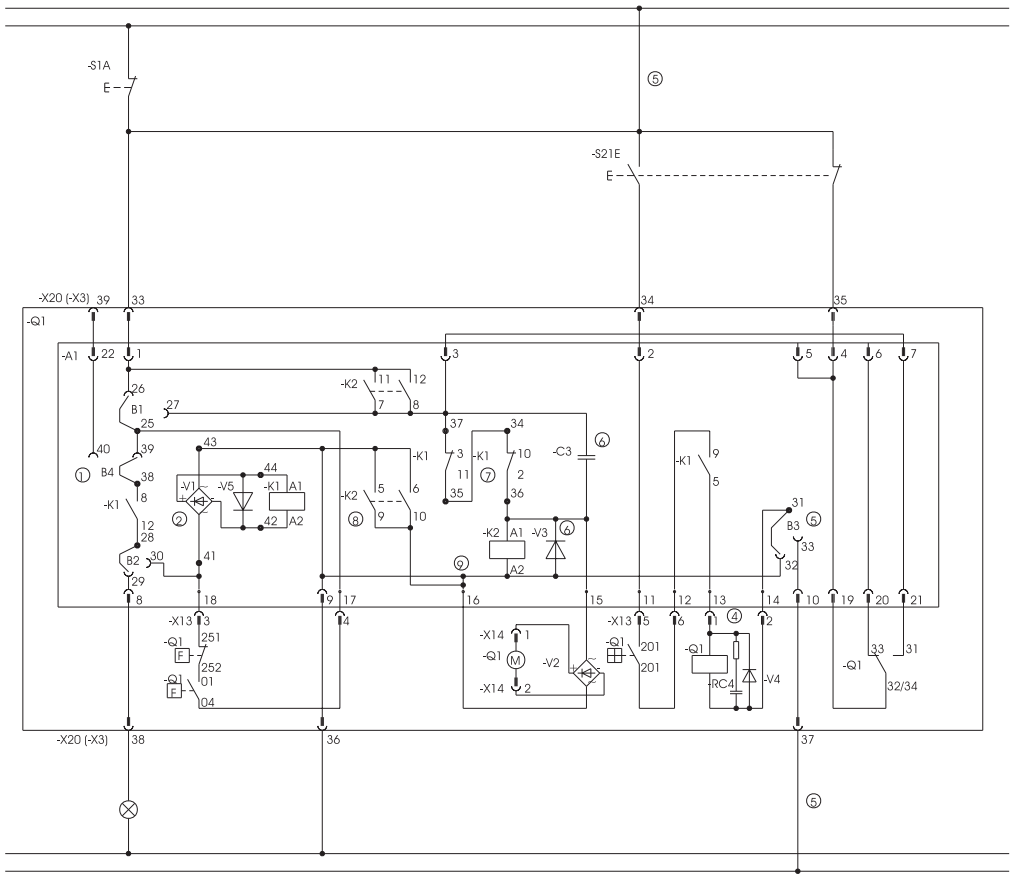


Fig. C / FV3.1

ME 4007...6307
Key positions 5 and 6
Operating mechanism

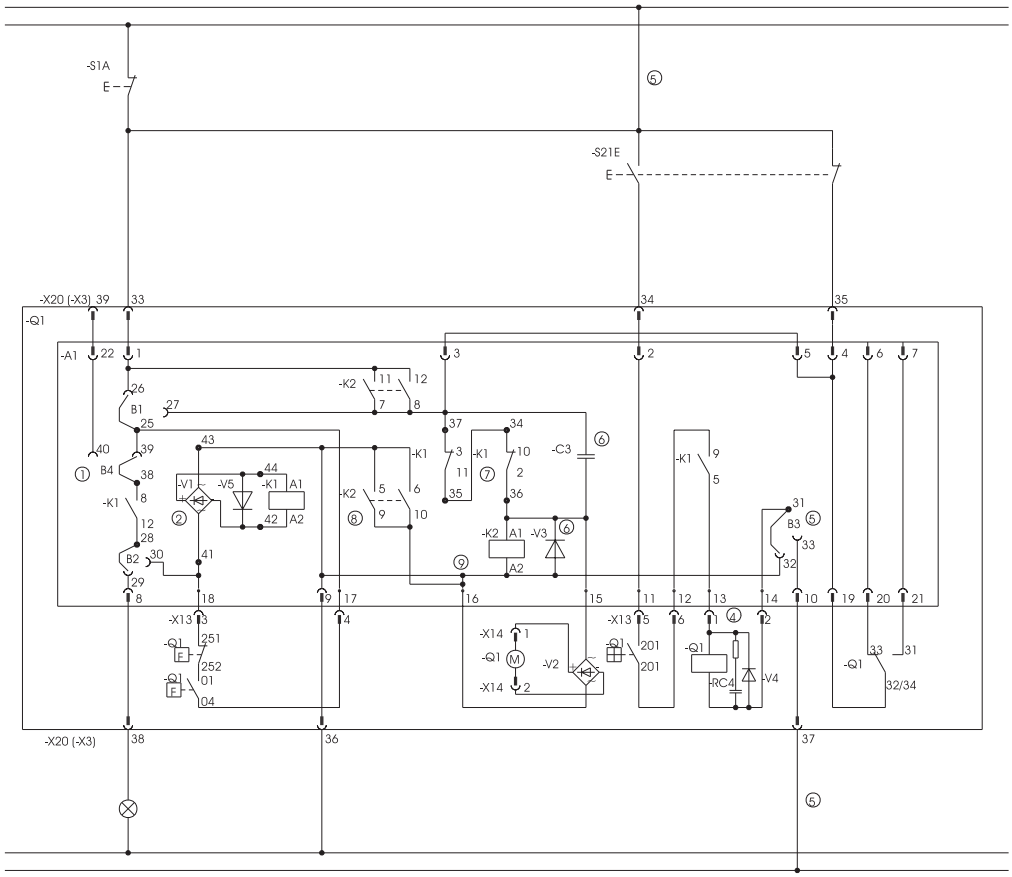


Fig. D / FV3.2

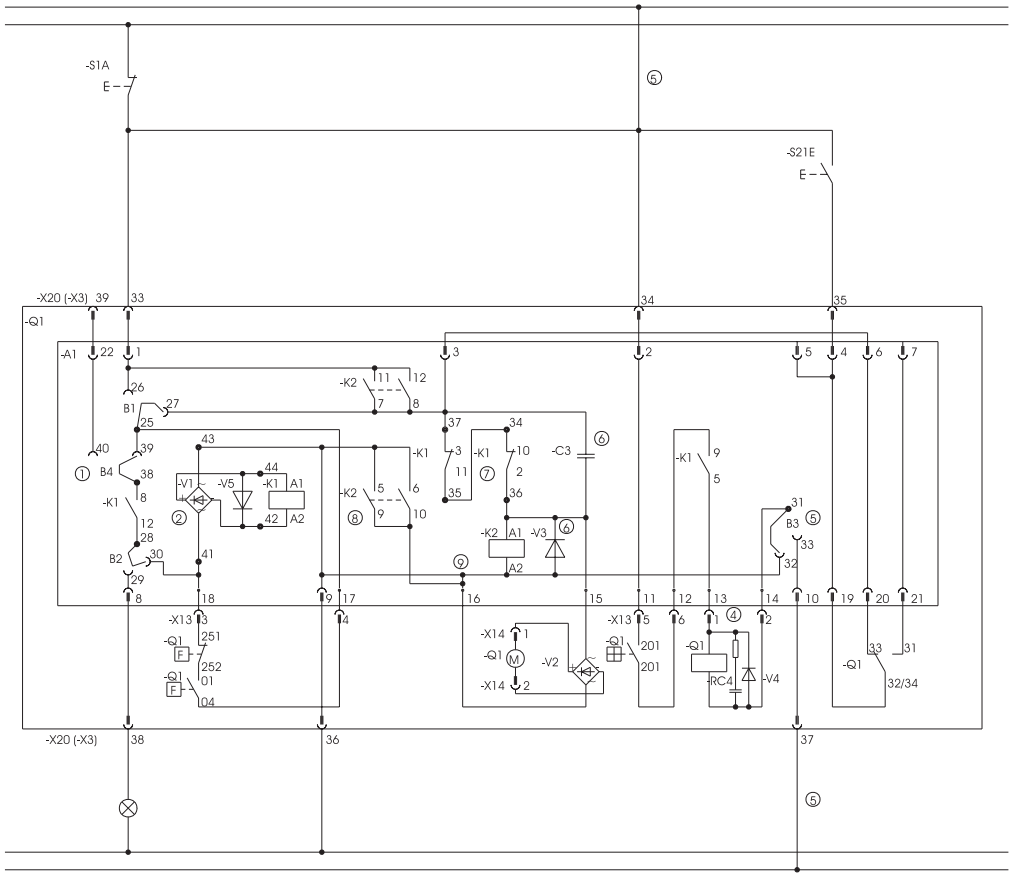
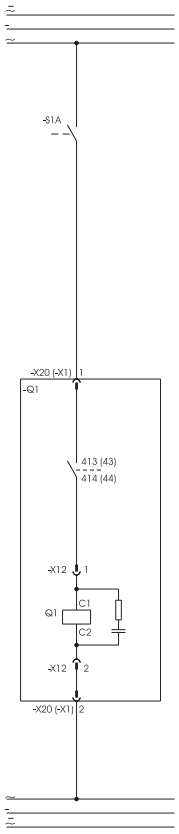
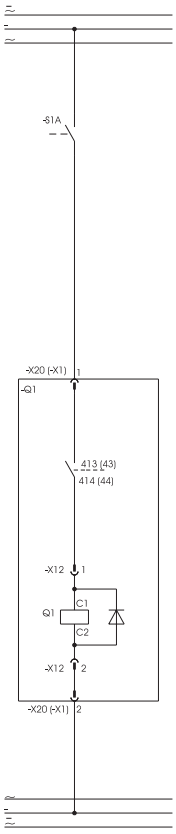


Fig. E / FV4

ME 4007...6307
Key positions 7 and 8
Release



21



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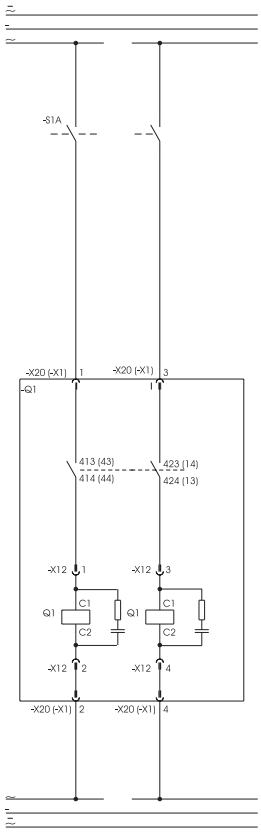
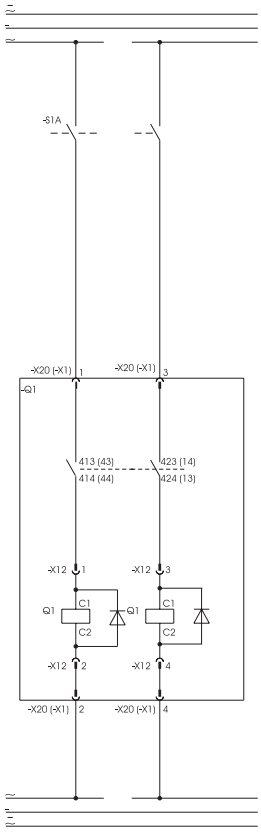


23



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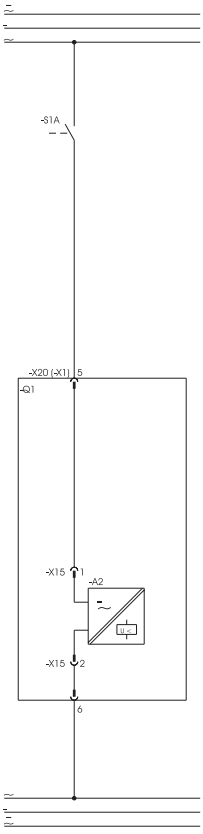
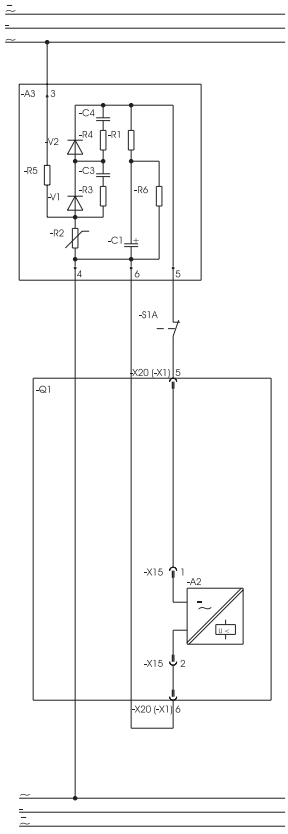
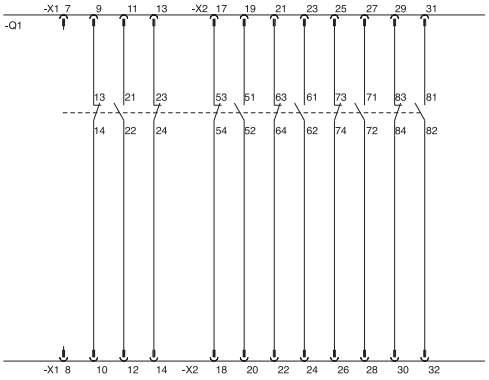


71 72



73

ME 4007...6307
Key position 9
Auxiliary switch



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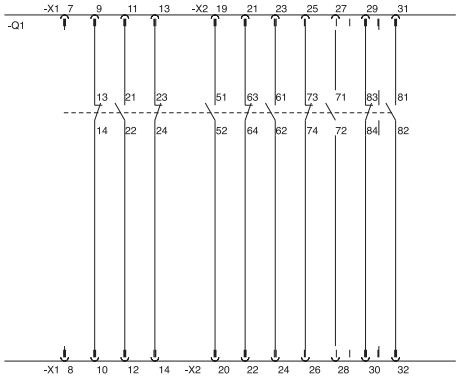

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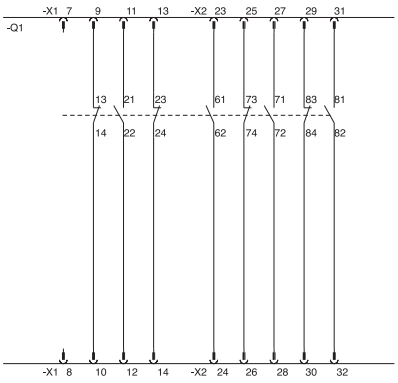

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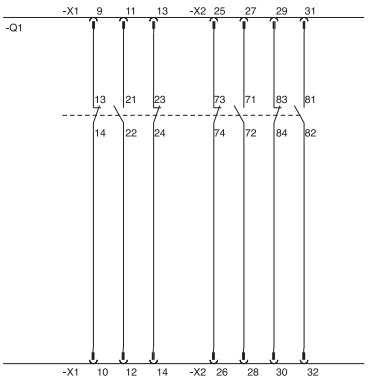
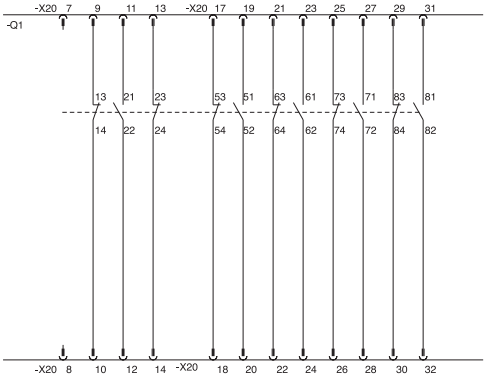
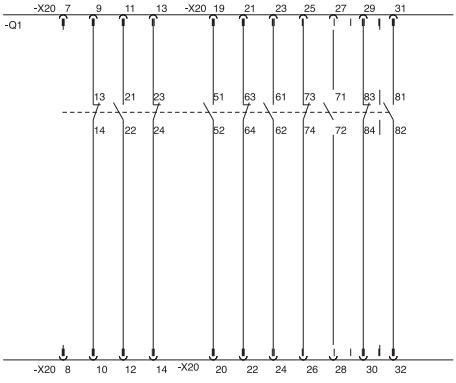


F



G



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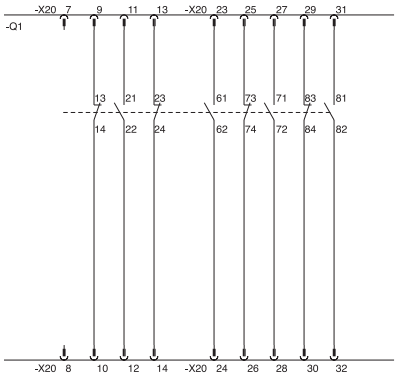

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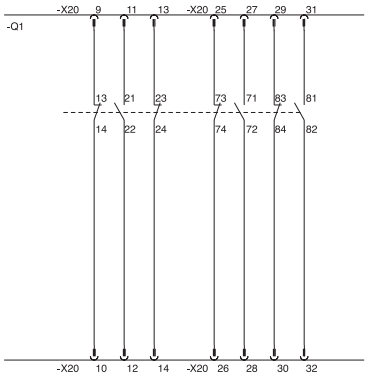
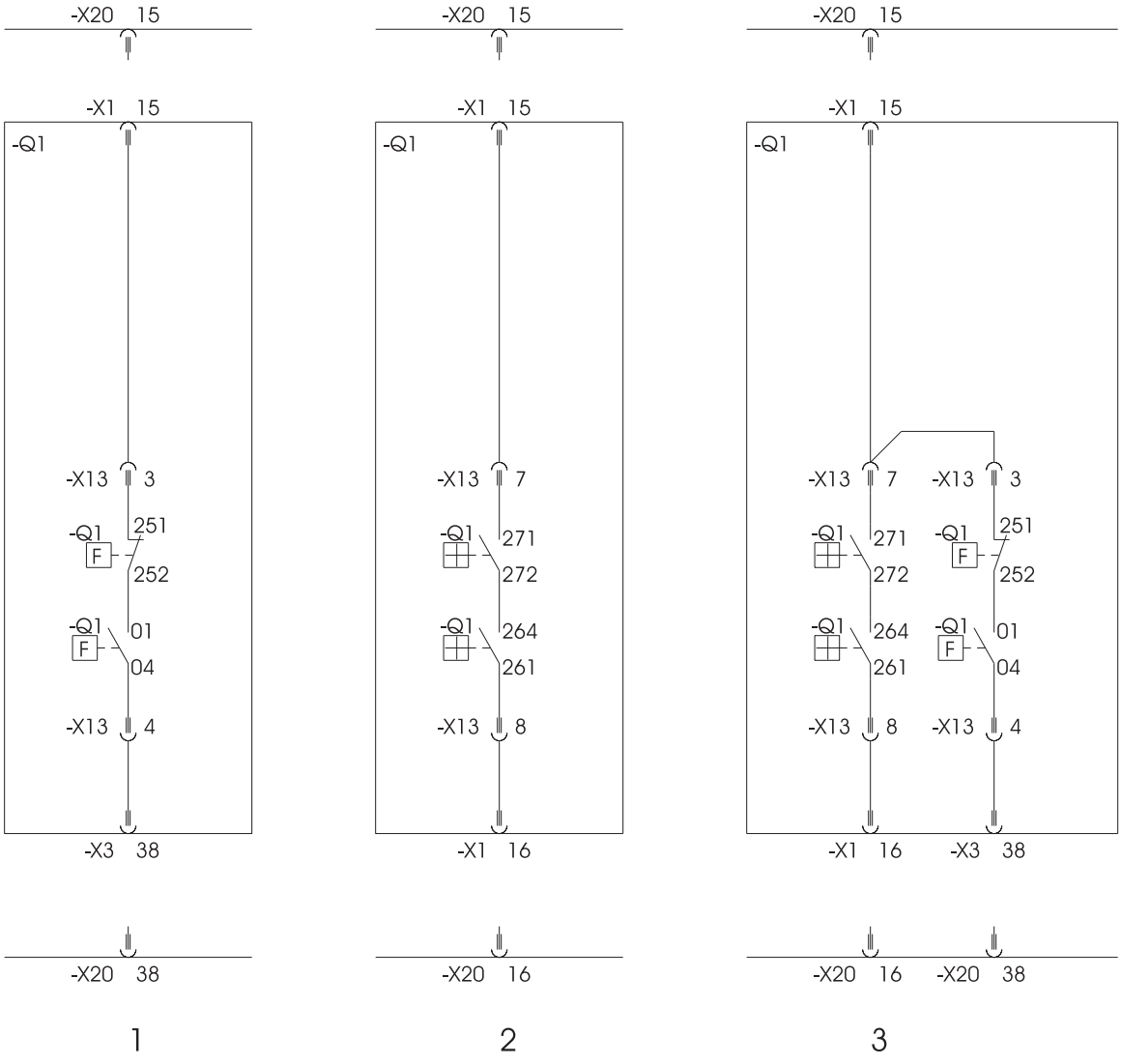


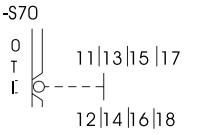
K

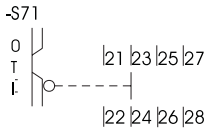
ME 4007...6307

Key position 10
Signal switch at operating mechanism overcurrent release

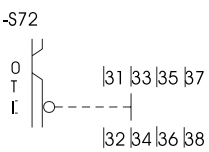


Key positions 11 and 12
Position indication switch at plug-in unit carrier (for further key number refer to handling instruction 'Withdrawable technique')





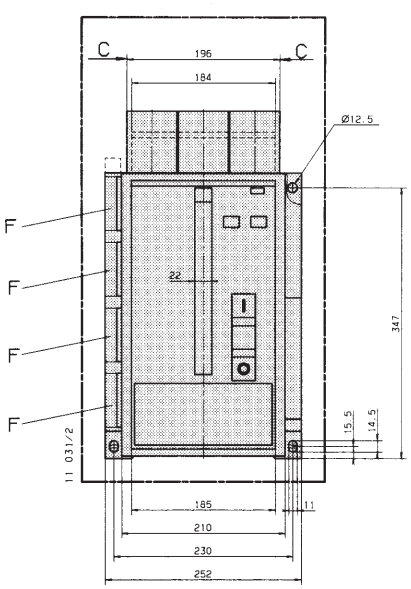
Charged signal for motor-type stored energy operating mechanism with SU key positions 5 and 6 included.
0 = isolation position
T = test position
[= operation position

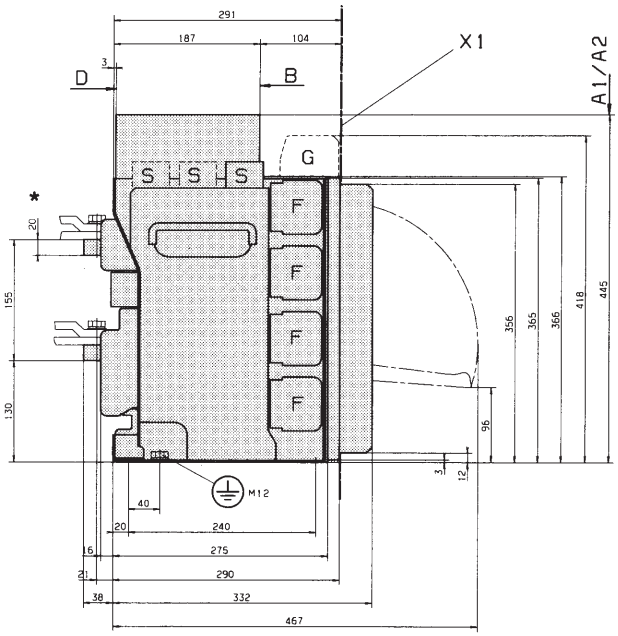


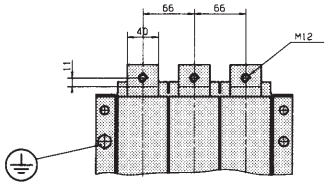
Types ME637 to ME1257 - Ranges N, S1, H

Horizontal connections

3-pole, frame size 10 - Dimensions in mm







Stationary mounting

F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

* = Switch for plug-in-unit type 15 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

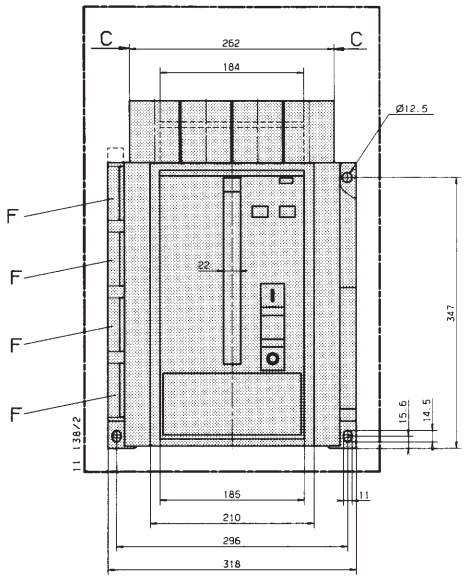
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 30 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 50 kA	150	150	50	50	50	150	150	100	75	100
	H	Icn ≤ 80 kA	150	150	50	50	50	200	150	100	100	100
	H	Icn ≤ 100 kA	250	250	100	75	100	300	250	100	100	100
AC3 ~ 440V	H	Icn ≤ 100 kA	(1)	(1)	(1)	(1)	(1)	300	(1)	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 50 kA	250	200	100	75	75	250	200	100	100	100
	H	Icn ≤ 70 kA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 50 kA	–	200	100	75	75	–	250	100	100	100
DC 220V	H	Icn ≤ 50 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100
DC 440V	H	Icn ≤ 40 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100
DC 750V	H	Icn ≤ 20 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100

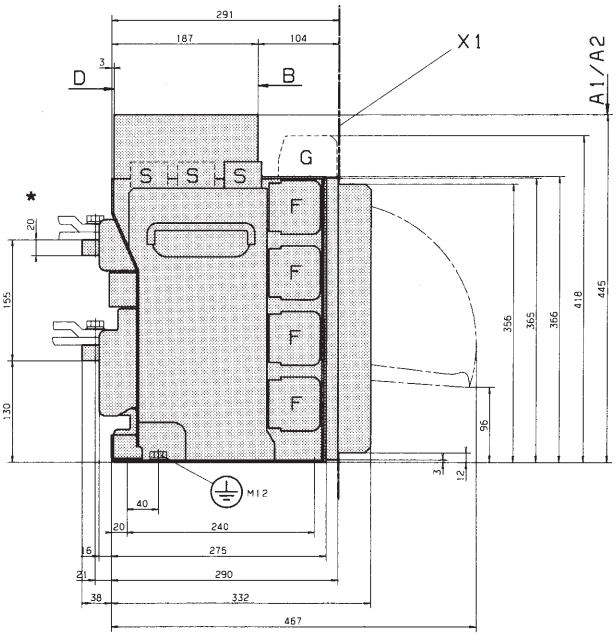
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

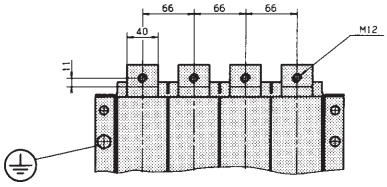
Types ME637 to ME1257 - Ranges N, S1, H

Horizontal connections

4-pole, frame size 10 - Dimensions in mm







Stationary mounting

F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

* = Switch for plug-in-unit type 15 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

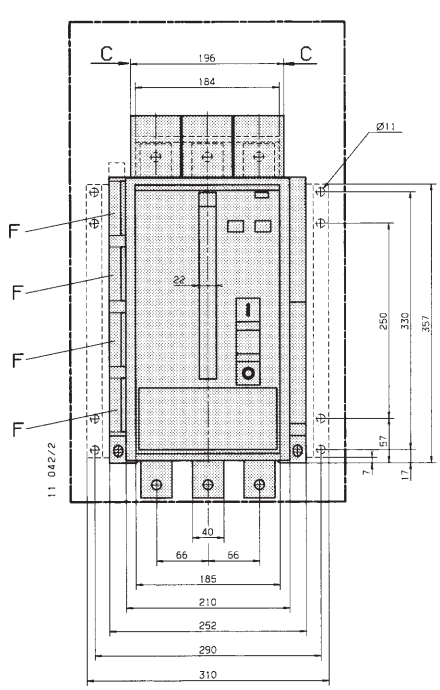
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 30 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 50 kA	150	150	50	50	50	150	150	100	75	100
	H	Icn ≤ 80 kA	150	150	50	50	50	200	150	100	100	100
	H	Icn ≤ 100 kA	250	250	100	75	100	300	250	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 50 kA	250	200	100	75	75	250	200	100	100	100
	H	Icn ≤ 70 kA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 50 kA	–	200	100	75	75	–	250	100	100	100

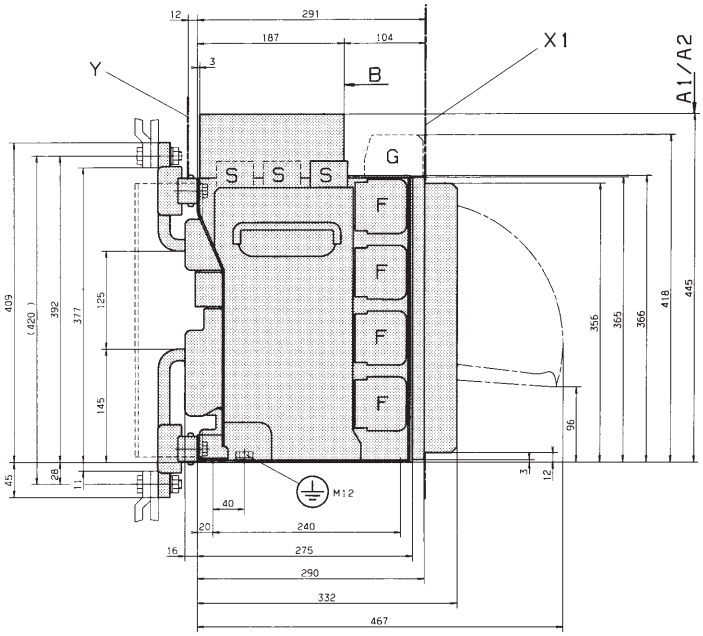
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V

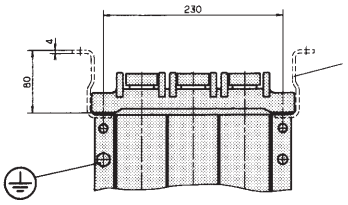
Types ME637 to ME1257 - Ranges N, S1, H

Vertical connections

3-pole, frame size 10 - Dimensions in mm







Angular spacer

F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

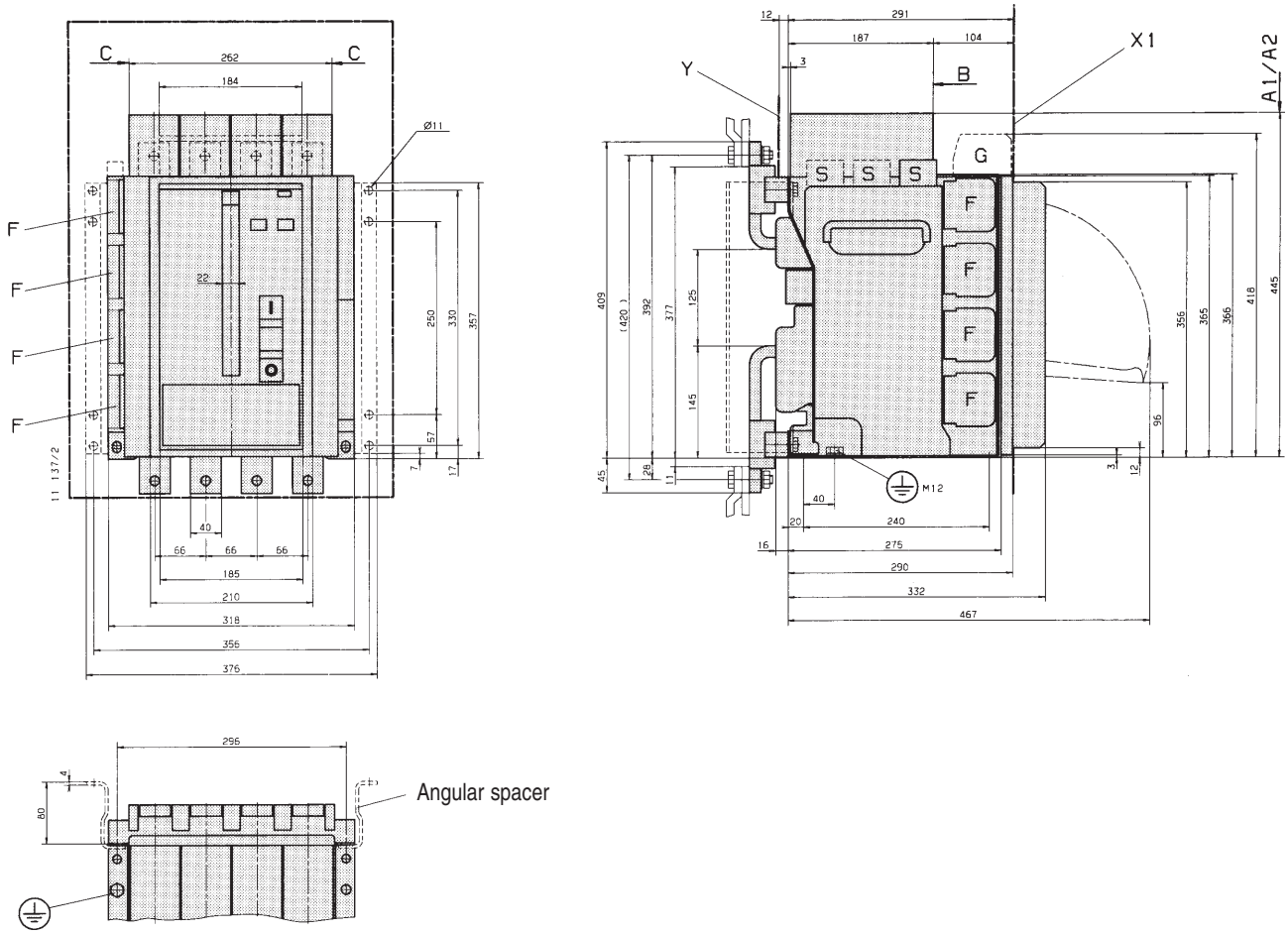
Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 30 kA	100	–	100	50	100	–	100	75
	H, S1	Icn ≤ 50 kA	200	150	100	50	200	200	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	300	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 50 kA	300	200	100	75	300	250	100	100
	H	Icn ≤ 70 kA	(1)	300	100	75	(1)	300	100	100
AC3 ~ 690V	H, S1	Icn ≤ 50 kA	–	200	100	75	–	250	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME637 to ME1257 - Ranges N, S1, H

Vertical connections

4-pole, frame size 10 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

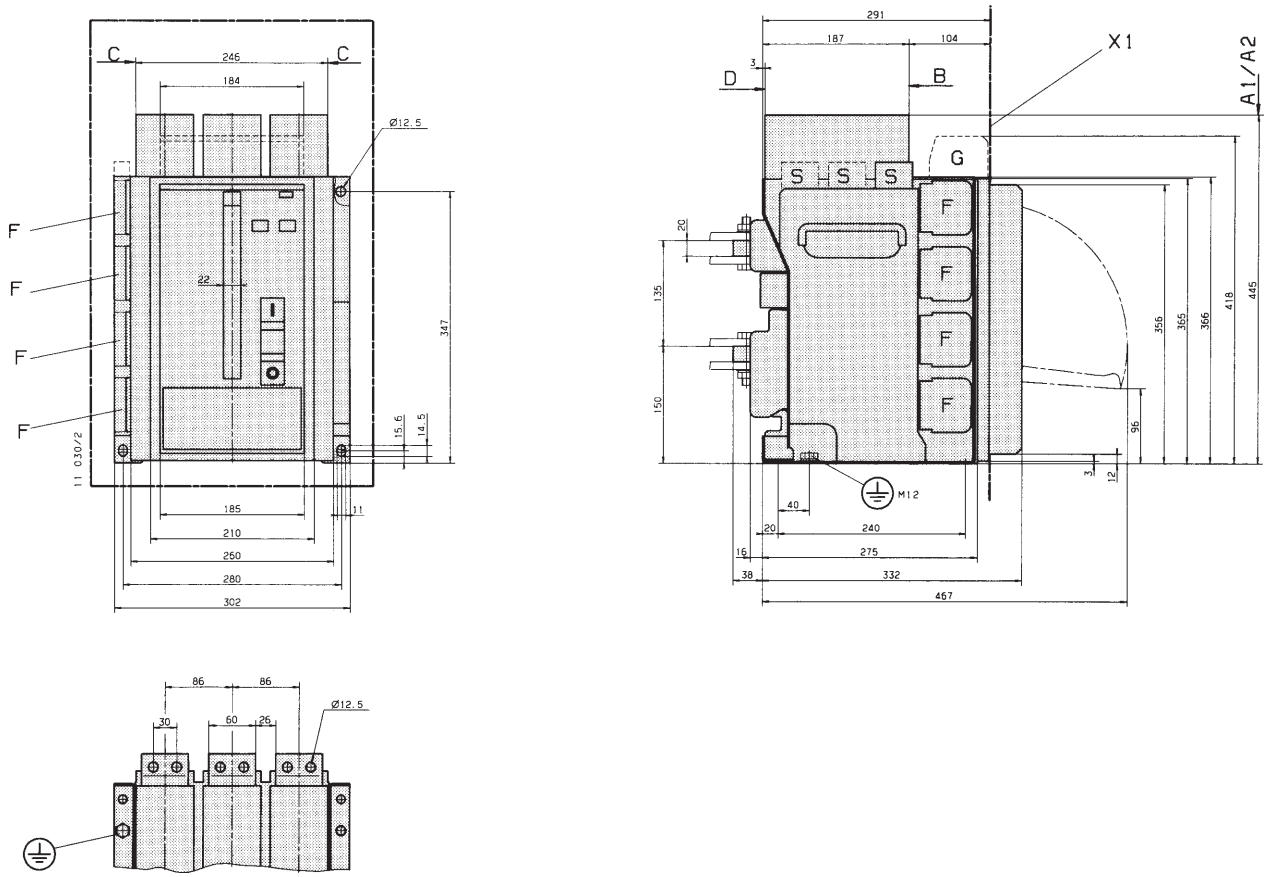
Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 30 kA	100	–	100	50	100	–	100	75
	H, S1	Icn ≤ 50 kA	200	150	100	50	200	200	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 50 kA	300	200	100	75	300	250	100	100
	H	Icn ≤ 70 kA	(1)	300	100	75	(1)	300	100	100
AC3 ~ 690V	H, S1	Icn ≤ 50 kA	–	200	100	75	–	250	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME1607 to ME2007 - Ranges N, S1, H

Horizontal connections

3-pole, frame size 20 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

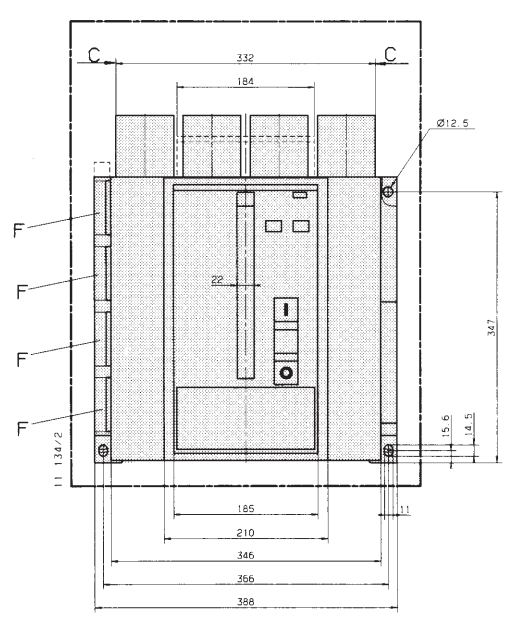
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 35 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 55 kA	200	150	50	50	50	200	150	100	75	100
	H	Icn ≤ 80 kA	200	150	50	50	50	250	150	100	100	100
	H	Icn ≤ 100 kA	250	200	50	50	50	300	200	100	100	100
AC3 ~ 440V	H	Icn ≤ 100 kA	(1)	(1)	(1)	(1)	(1)	(1)	250	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 55 kA	200	150	100	75	75	200	150	100	100	100
	H	Icn ≤ 70 kA	250	150	100	75	75	250	150	100	100	100
	H	Icn ≤ 80 KA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 55 kA	–	200	100	75	75	–	200	100	100	100
DC 220V	H	Icn ≤ 60 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100
DC 440V	H	Icn ≤ 45 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100
DC 750V	H	Icn ≤ 20 kA	–	(1)	(1)	(1)	(1)	–	150	100	100	100

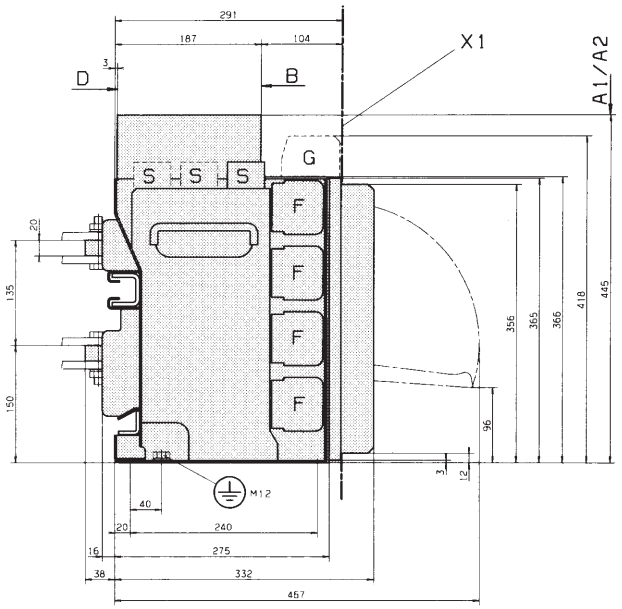
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

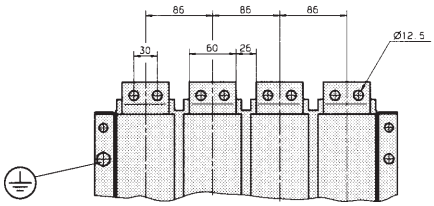
Types ME1607 to ME2007 - Ranges N, S1, H

Horizontal connections

4-pole, frame size 20 - Dimensions in mm







F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

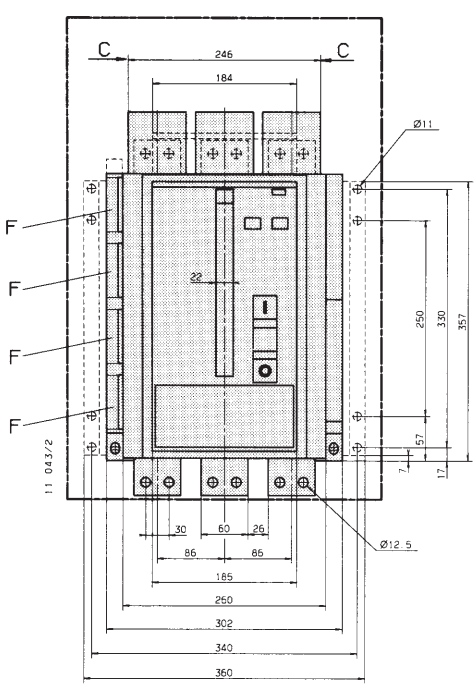
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 35 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 55 kA	200	150	50	50	50	200	150	100	75	100
	H	Icn ≤ 80 kA	200	150	50	50	50	250	150	100	100	100
	H	Icn ≤ 100 kA	250	200	50	50	50	300	200	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 55 kA	200	150	100	75	75	200	150	100	100	100
	H	Icn ≤ 70 kA	250	150	100	75	75	250	150	100	100	100
	H	Icn ≤ 80 kA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 55 kA	–	200	100	75	75	–	200	100	100	100

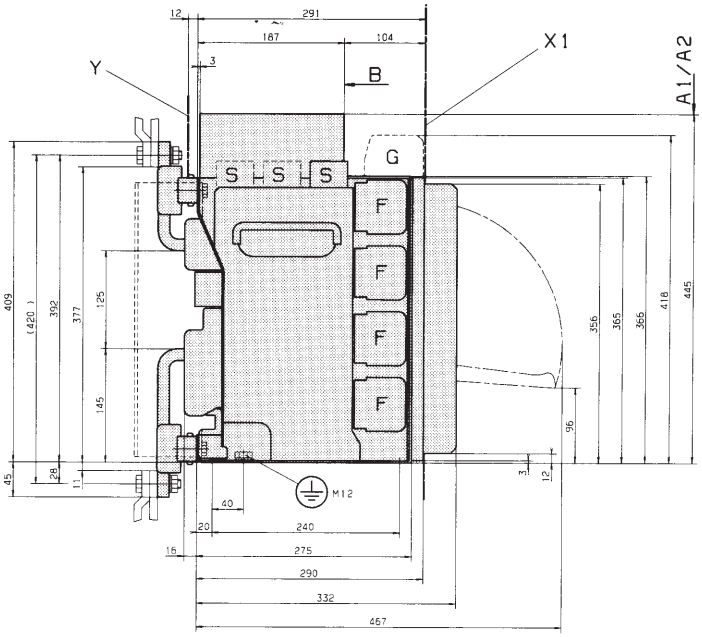
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V

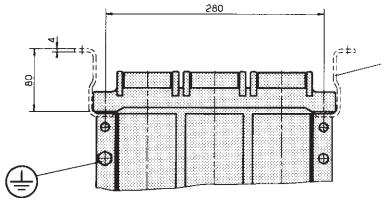
Types ME1607 to ME2007 - Ranges N, S1, H

Vertical connections

3-pole, frame size 20 - Dimensions in mm







F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

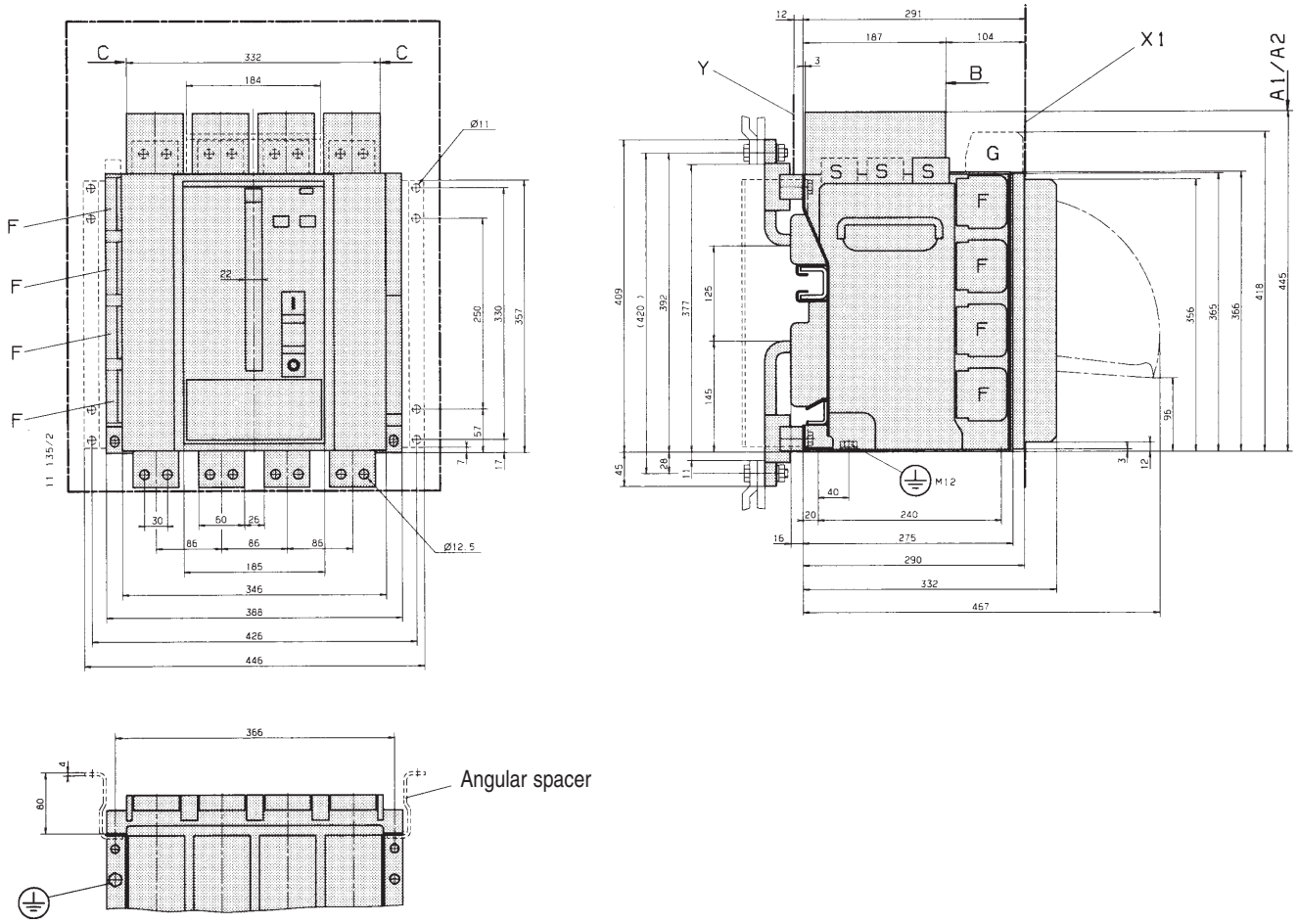
Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 35 kA	100	–	100	50	100	–	100	75
	H, S1	Icn ≤ 55 kA	200	150	100	50	200	150	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 55 kA	250	200	100	75	250	250	100	100
	H	Icn ≤ 70 kA	300	200	100	75	300	250	100	100
		Icn ≤ 80 kA	300	250	100	75	(1)	(1)	100	100
AC3 ~ 690V	H, S1	Icn ≤ 55 kA	–	200	100	75	–	250	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME1607 to ME2007 - Ranges N, S1, H

Vertical connections

4-pole, frame size 20 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 35 kA	100	–	100	50	100	–	100	75
	H, S1	Icn ≤ 55 kA	200	150	100	50	200	150	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 55 kA	250	200	100	75	250	250	100	100
	H	Icn ≤ 70 kA	300	200	100	75	300	250	100	100
	H	Icn ≤ 80 kA	300	250	100	75	(1)	(1)	100	100
AC3 ~ 690V	H, S1	Icn ≤ 55 kA	–	200	100	75	–	250	100	100

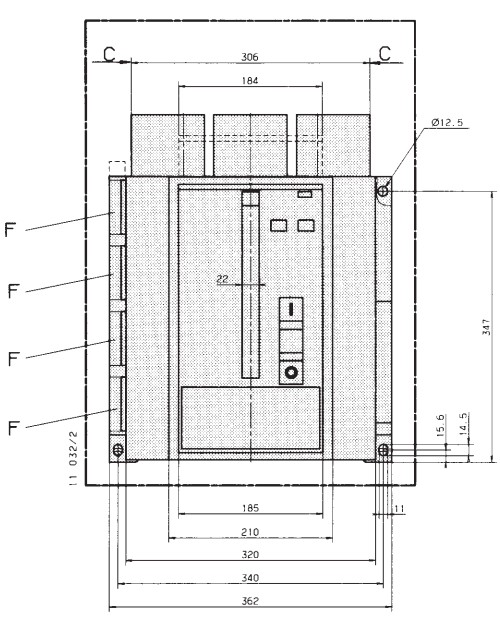
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

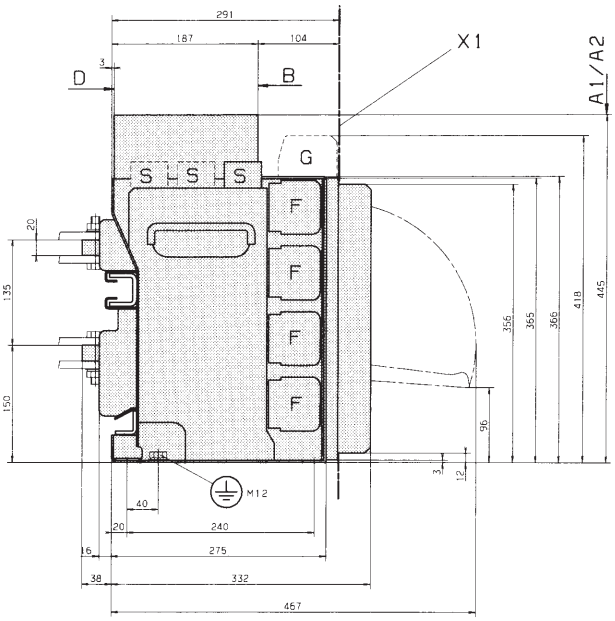
ME07 - Overall dimensions

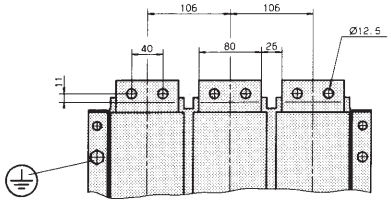
Types ME2507 - Ranges N, S1, H

Horizontal connections

3-pole, frame size 30 - Dimensions in mm







F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

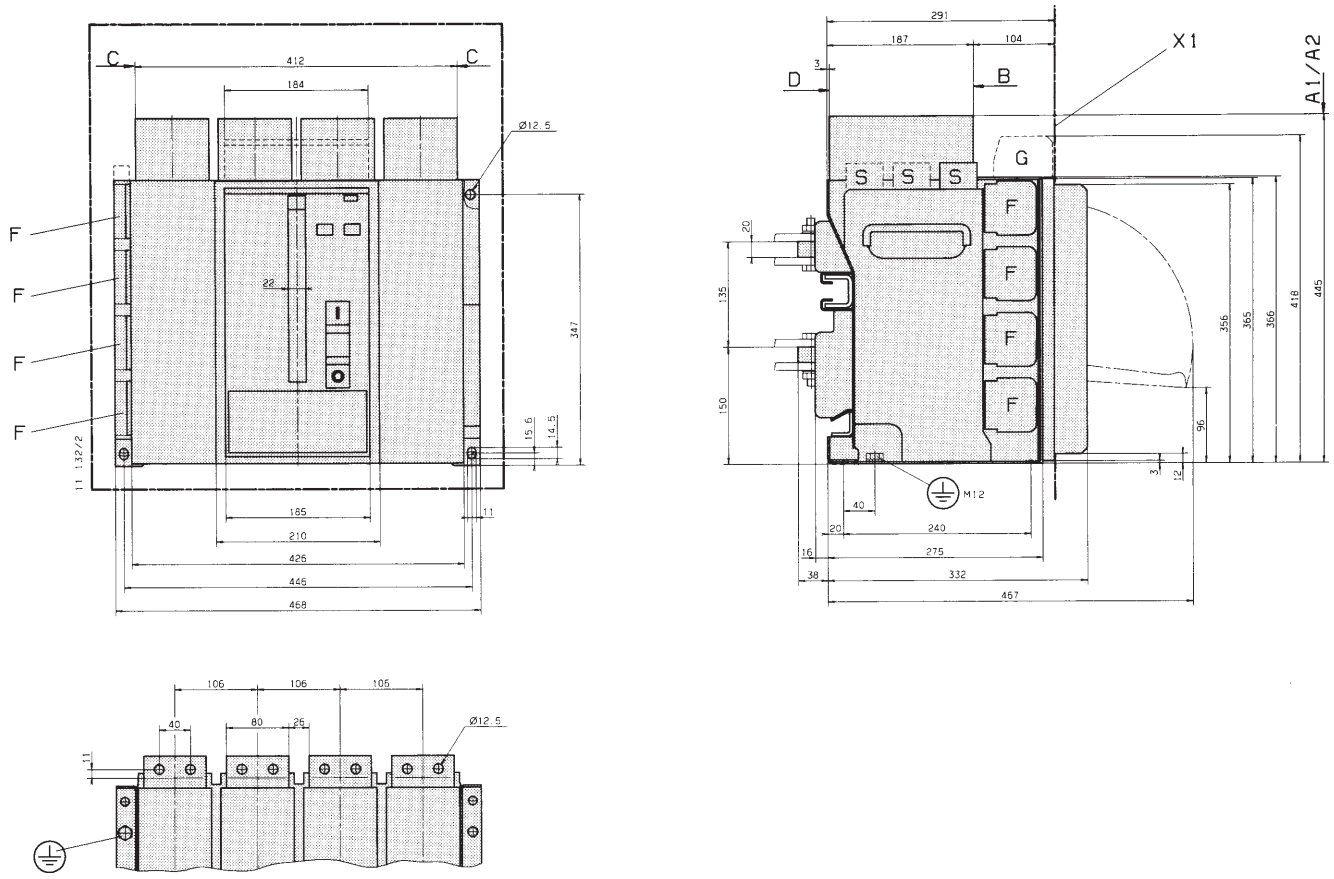
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 40 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 65 kA	250	150	50	50	50	250	150	100	75	100
	H	Icn ≤ 80 kA	250	150	50	50	50	250	150	100	100	100
	H	Icn ≤ 100 kA	250	150	50	50	50	250	200	100	100	100
AC3 ~ 440V	H	Icn ≤ 100 kA	(1)	(1)	(1)	(1)	(1)	250	(1)	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 65 kA	250	150	100	75	75	250	150	100	100	100
	H	Icn ≤ 70 kA	250	150	100	75	75	250	150	100	100	100
	H	Icn ≤ 90 KA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 65 kA	–	200	100	75	75	–	200	100	100	100
DC 220V	H	Icn ≤ 60 kA	–	(1)	(1)	(1)	(1)	–	200	100	100	100
DC 440V	H	Icn ≤ 45 kA	–	(1)	(1)	(1)	(1)	–	200	100	100	100
DC 750V	H	Icn ≤ 30 kA	–	(1)	(1)	(1)	(1)	–	200	100	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME2507 - Ranges N, S1, H

Horizontal connections

4-pole, frame size 30 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 40 kA	75	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 65 kA	250	150	50	50	50	250	150	100	75	100
	H	Icn ≤ 80 kA	250	150	50	50	50	250	150	100	100	100
	H	Icn ≤ 100 kA	250	150	50	50	50	250	200	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 65 kA	250	150	100	75	75	250	150	100	100	100
	H	Icn ≤ 70 kA	250	200	100	75	75	250	150	100	100	100
	H	Icn ≤ 90 kA	300	250	100	75	75	300	250	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 65 kA	–	200	100	75	75	–	200	100	100	100

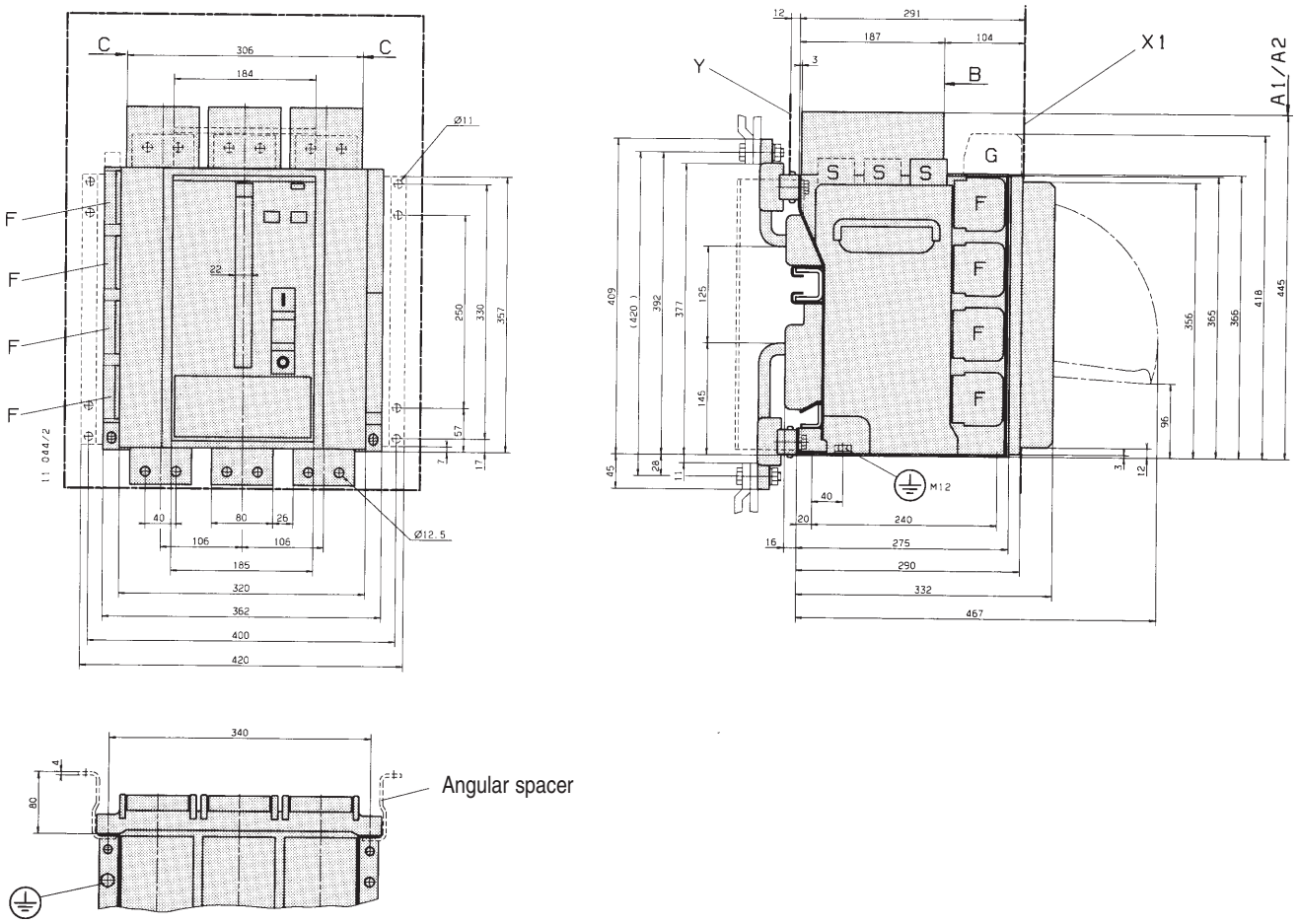
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V

ME07 - Overall dimensions

Types ME2507 - Ranges N, S1, H

Vertical connections

3-pole, frame size 30 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

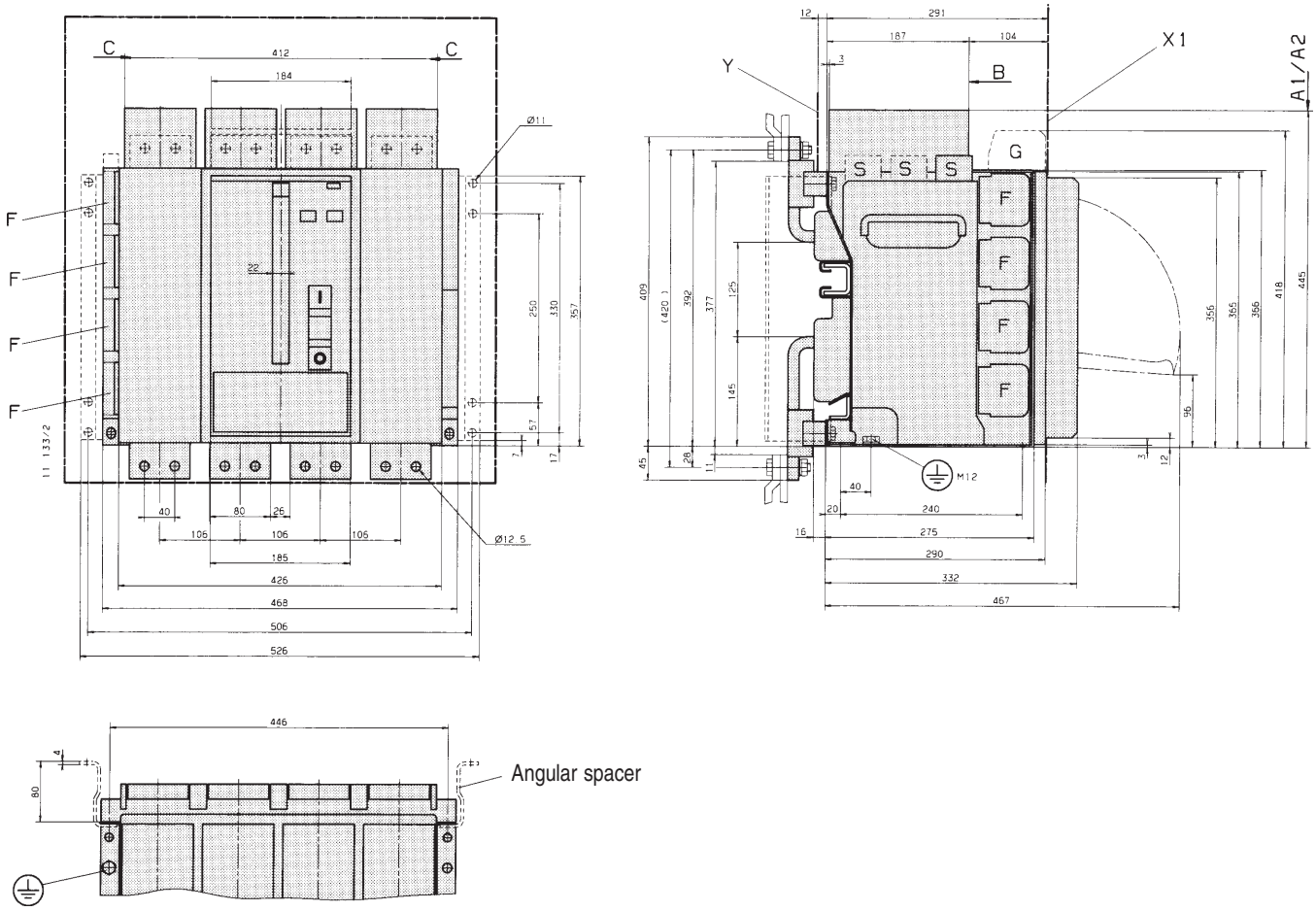
Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 40 kA	100	–	100	50	100	–	100	100
	H, S1	Icn ≤ 65 kA	250	150	100	50	250	150	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	200	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 65 kA	300	200	100	75	300	250	100	100
	H	Icn ≤ 70 kA	300	200	100	75	300	250	100	100
		Icn ≤ 90 kA	(1)	300	100	75	(1)	300	100	100
AC3 ~ 690V	H, S1	Icn ≤ 65 kA	–	200	100	75	–	250	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME2507 - Ranges N, S1, H

Vertical connections

4-pole, frame size 30 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 40 kA	100	–	100	50	100	–	100	100
	H, S1	Icn ≤ 65 kA	250	150	100	50	250	150	100	100
	H	Icn ≤ 80 kA	300	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 65 kA	300	200	100	75	300	250	100	100
	H	Icn ≤ 70 kA	300	200	100	75	300	250	100	100
		Icn ≤ 90 kA	(1)	300	100	75	(1)	300	100	100
AC3 ~ 690V	H, S1	Icn ≤ 65 kA	–	200	100	75	–	250	100	100

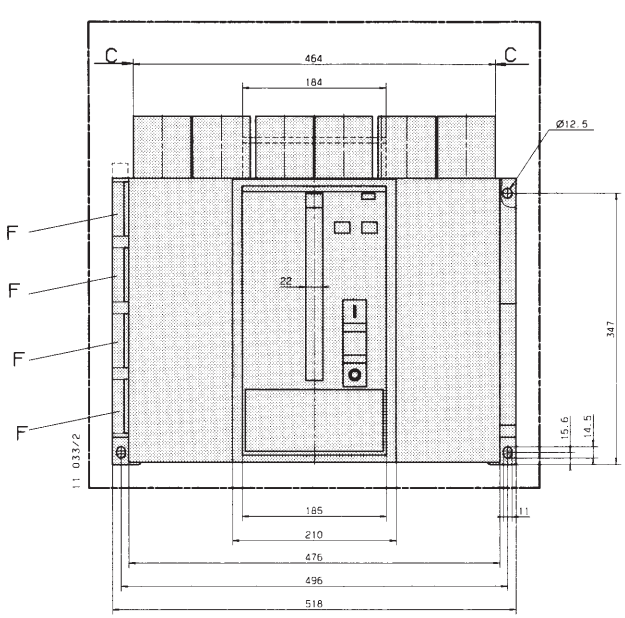
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

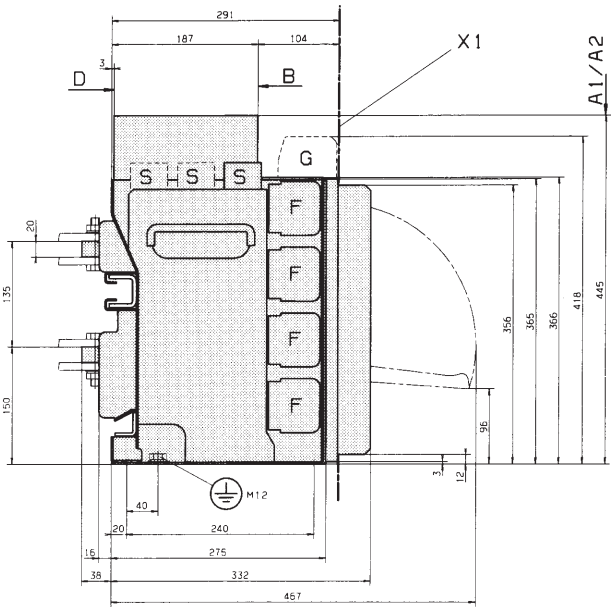
ME07 - Overall dimensions

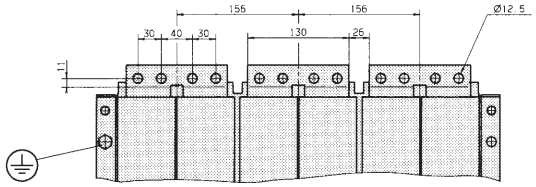
Types ME3207 - Ranges N, S1, H

Horizontal connections

3-pole, frame size 40 - Dimensions in mm







F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

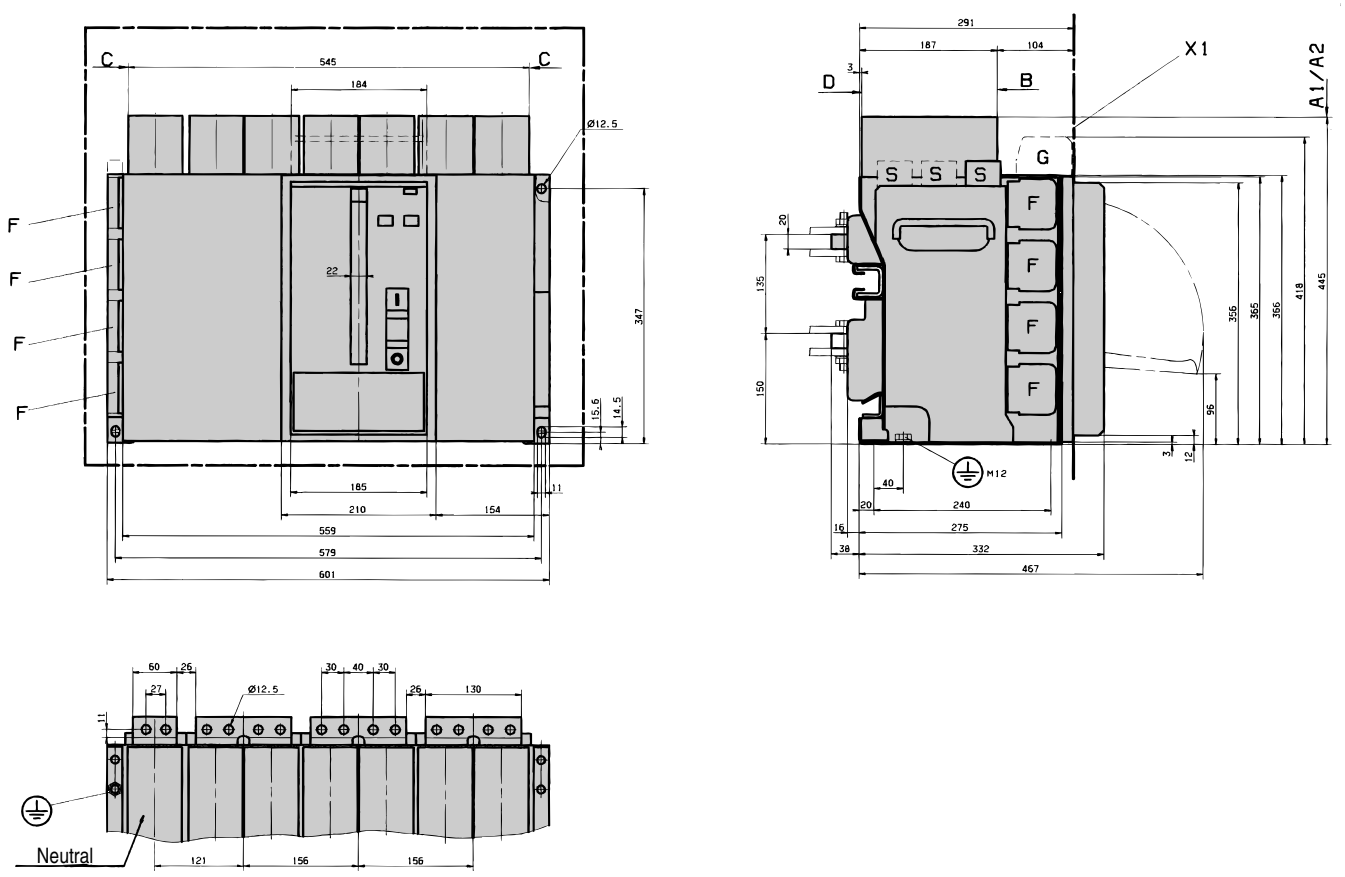
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	N	Icn ≤ 40 kA	100	–	50	50	50	100	–	100	75	100
	H, S1	Icn ≤ 70 kA	200	150	50	50	50	200	200	100	75	100
	H	Icn ≤ 80 kA	200	150	50	50	50	250	250	100	100	100
	H	Icn ≤ 100 kA	250	250	100	50	100	300	250	100	100	100
AC3 ~ 440V	H	Icn ≤ 100 kA	(1)	(1)	(1)	(1)	(1)	300	(1)	100	100	100
AC3 ~ 500V	H, S1	Icn ≤ 70 kA	250	200	100	75	75	250	200	100	100	100
	H	Icn ≤ 80 kA	250	200	100	75	75	300	200	100	100	100
	H	Icn ≤ 90 KA	300	300	100	75	75	(1)	(1)	100	100	100
AC3 ~ 690V	H, S1	Icn ≤ 70 kA	–	200	100	75	100	–	200	100	100	100
	H	Icn ≤ 80 KA	–	200	100	75	100	–	250	100	100	100
DC 220V	H	Icn ≤ 65 kA	–	300	100	100	100	–	–	–	–	–
DC 440V	H	Icn ≤ 50 kA	–	(1)	(1)	(1)	(1)	–	200	100	100	100
DC 750V	H	Icn ≤ 30 kA	–	(1)	(1)	(1)	(1)	–	300	100	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME3207 - Ranges S1, H

Horizontal connections

4-pole, frame size 40 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

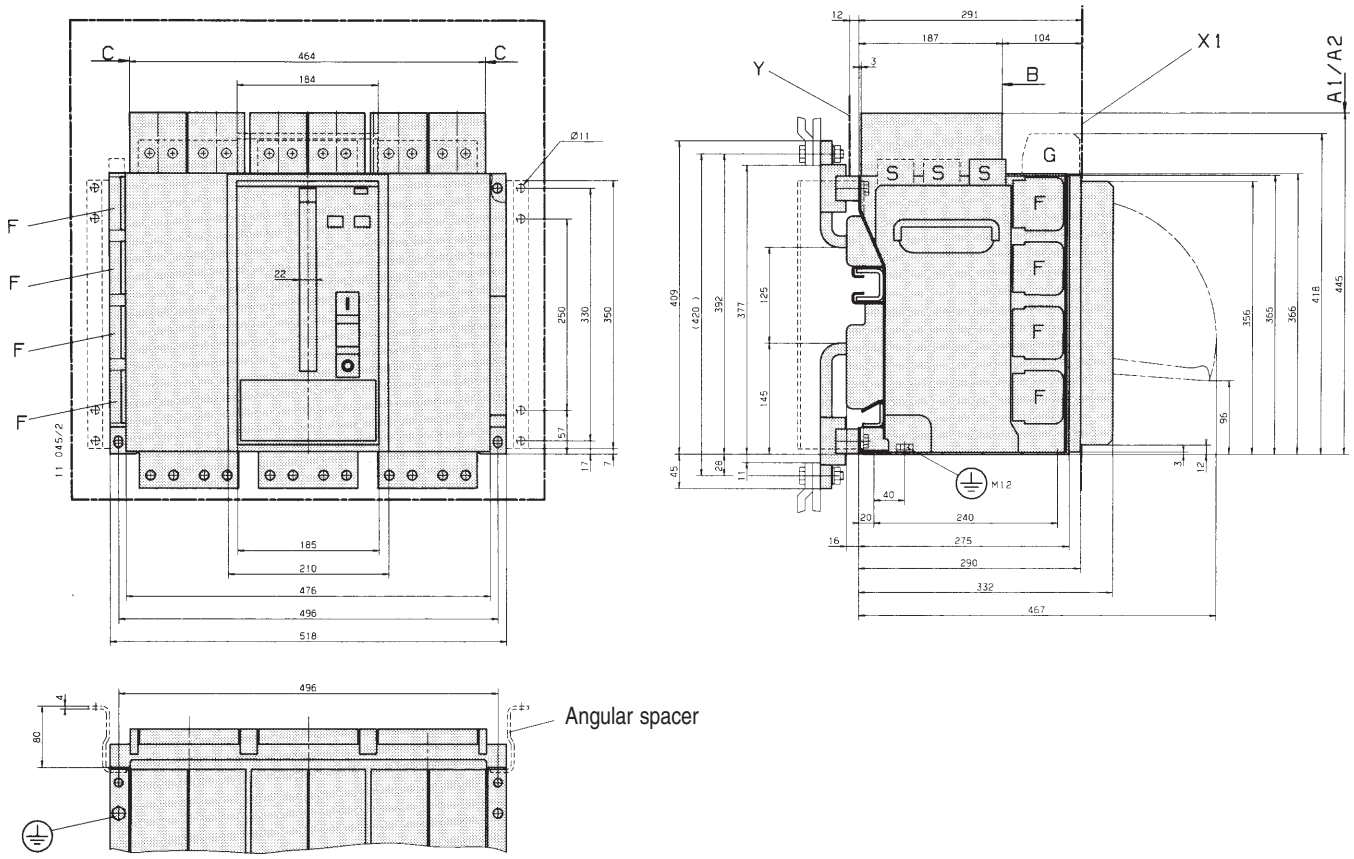
Operating voltage	Range		Horizontal connections									
			Insulated parts					Grounded parts				
			A1	A2	B	C	D	A1	A2	B	C	D
AC3 ~ 415V	S1	Icn ≤ 65 kA	200	150	50	50	50	200	200	100	75	100
	H	Icn ≤ 80 kA	200	150	50	50	50	250	250	100	100	100
	H	Icn ≤ 100 kA	250	250	100	50	100	300	250	100	100	100
AC3 ~ 440V	H	Icn ≤ 100 kA	(1)	(1)	(1)	(1)	(1)	300	(1)	100	100	100
AC3 ~ 500V	S1	Icn ≤ 65 kA	250	200	100	75	75	250	200	100	100	100
	H	Icn ≤ 80 kA	250	200	100	75	75	300	200	100	100	100
	H	Icn ≤ 90 KA	300	300	100	75	75	(1)	(1)	100	100	100
AC3 ~ 690V	S1	Icn ≤ 65 kA	–	200	100	75	100	–	200	100	100	100
	H	Icn ≤ 80 KA	–	200	100	75	100	–	250	100	100	100

A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME3207 - Ranges N, S1, H

Vertical connections

3-pole, frame size 40 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

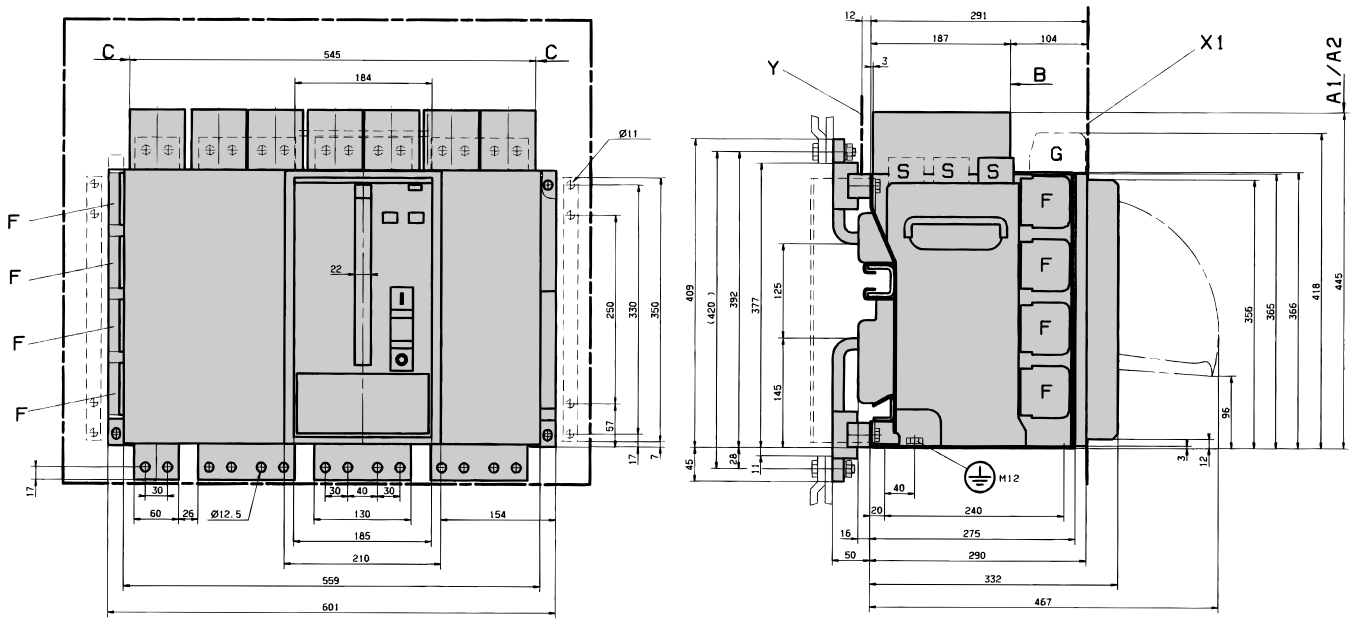
Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	N	Icn ≤ 40 kA	100	–	100	50	100	–	100	100
	H, S1	Icn ≤ 70 kA	250	150	100	50	250	200	100	100
	H	Icn ≤ 80 kA	250	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	H, S1	Icn ≤ 70 kA	250	200	100	75	300	250	100	100
	H	Icn ≤ 80 kA	250	200	100	75	300	250	100	100
		Icn ≤ 90 kA	(1)	300	100	100	(1)	(1)	100	100
AC3 ~ 690V	H, S1	Icn ≤ 70 kA	–	200	100	100	–	250	100	100
	H	Icn ≤ 80 KA	–	250	100	100	–	300	100	100

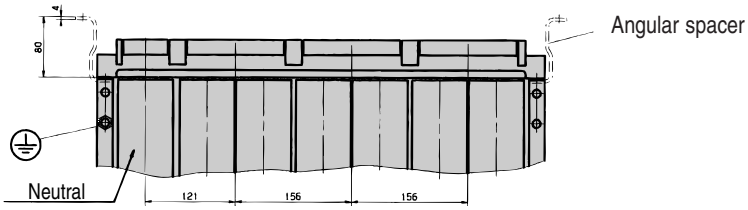
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

Types ME3207 - Ranges S1, H

Vertical connections

4-pole, frame size 40 - Dimensions in mm





Angular spacer

F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Y = Insulating screen for vertical connections Upper edge according to dimensions A1, A2 (not included in delivery scope), angular spacer for attachment to vertical traverses (not included in delivery scope)

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

Operating voltage	Range		Vertical connections							
			Insulated parts				Grounded parts			
			A1	A2	B	C	A1	A2	B	C
AC3 ~ 415V	S1	Icn ≤ 65 kA	250	150	100	50	250	200	100	100
	H	Icn ≤ 80 kA	250	150	100	50	300	250	100	100
	H	Icn ≤ 100 kA	300	250	100	100	–	300	100	100
AC3 ~ 500V	S1	Icn ≤ 65 kA	250	200	100	75	300	250	100	100
	H	Icn ≤ 80 kA	250	200	100	75	300	250	100	100
		Icn ≤ 90 kA	(1)	300	100	100	(1)	(1)	100	100
AC3 ~ 690V	S1	Icn ≤ 65 kA	–	200	100	100	–	250	100	100
	H	Icn ≤ 80 kA	–	250	100	100	–	300	100	100

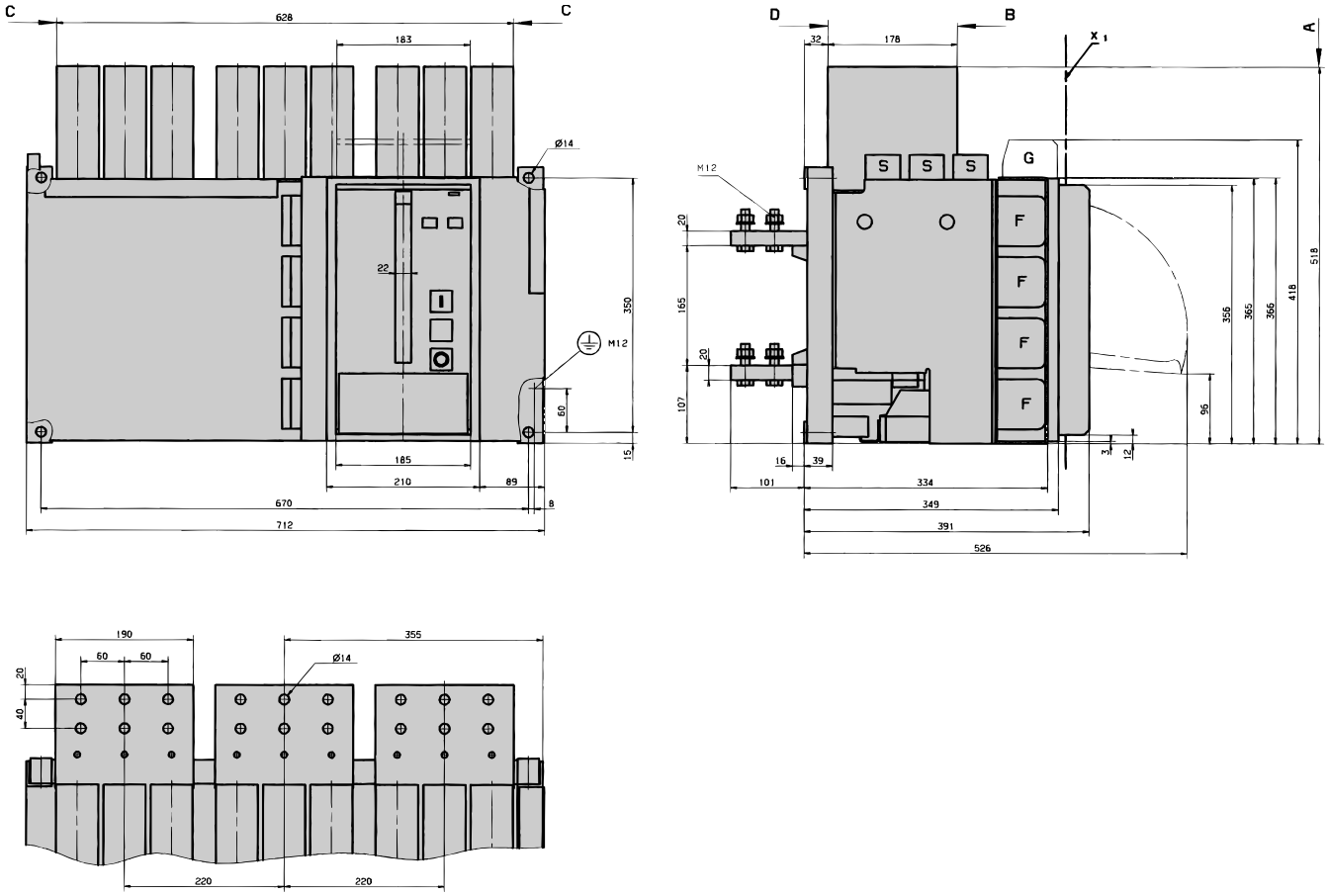
A1 = Arc chute without insert, standard version.
A2 = Arc chute with insert, special version for rated voltage up to 500V
(1) On request.

ME07 - Overall dimensions

Type ME4007S

Horizontal connections

3-pole, frame size 50 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

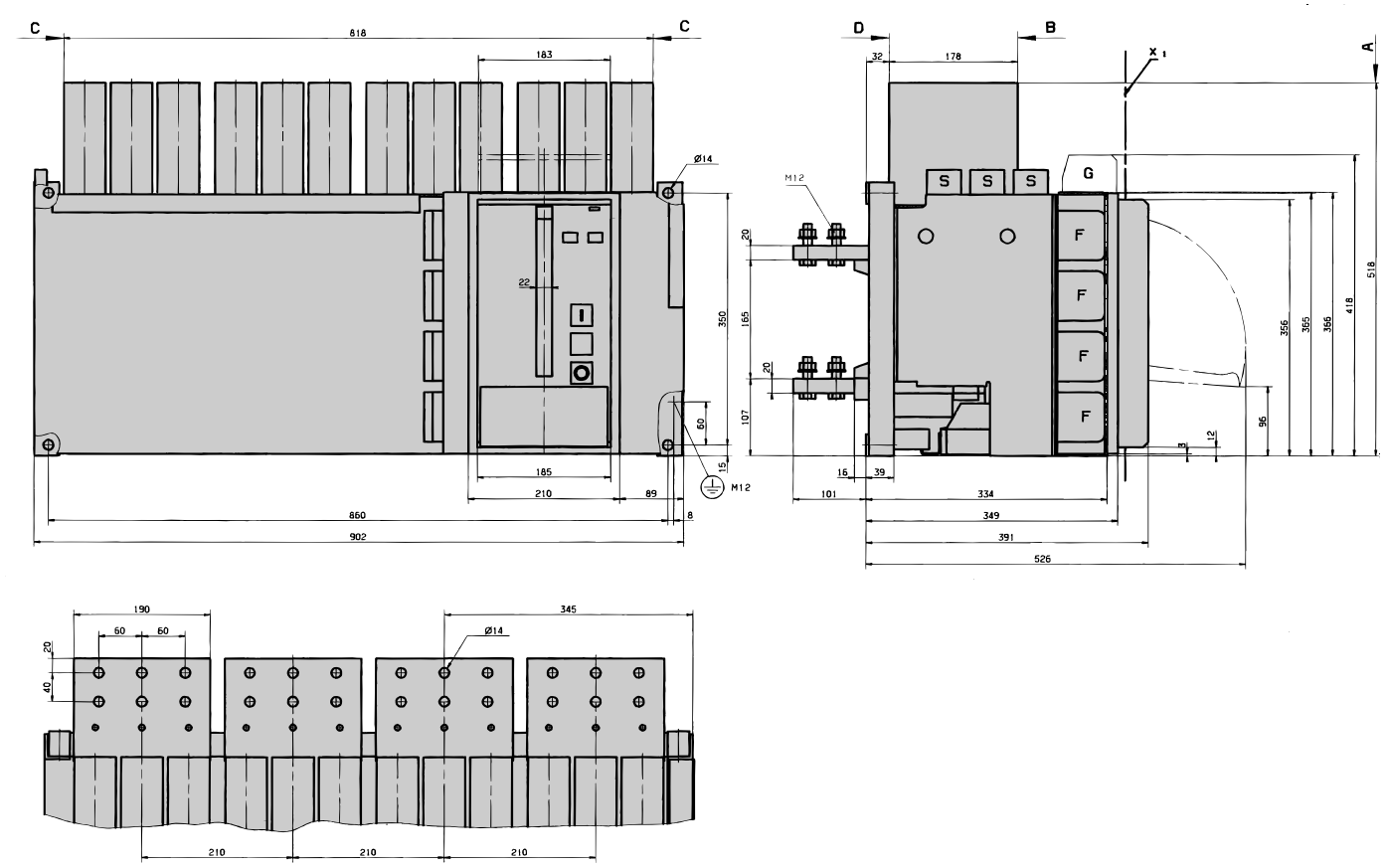
Operating voltage	Range		Horizontal connections							
			Insulated parts				Grounded parts			
			A	B	C	D	A	B	C	D
AC3 ~ 415V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100
AC3 ~ 440V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100
AC3 ~ 500V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100
AC3 ~ 690V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100

ME07 - Overall dimensions

Type ME4007S

Horizontal connections

4-pole, frame size 50 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

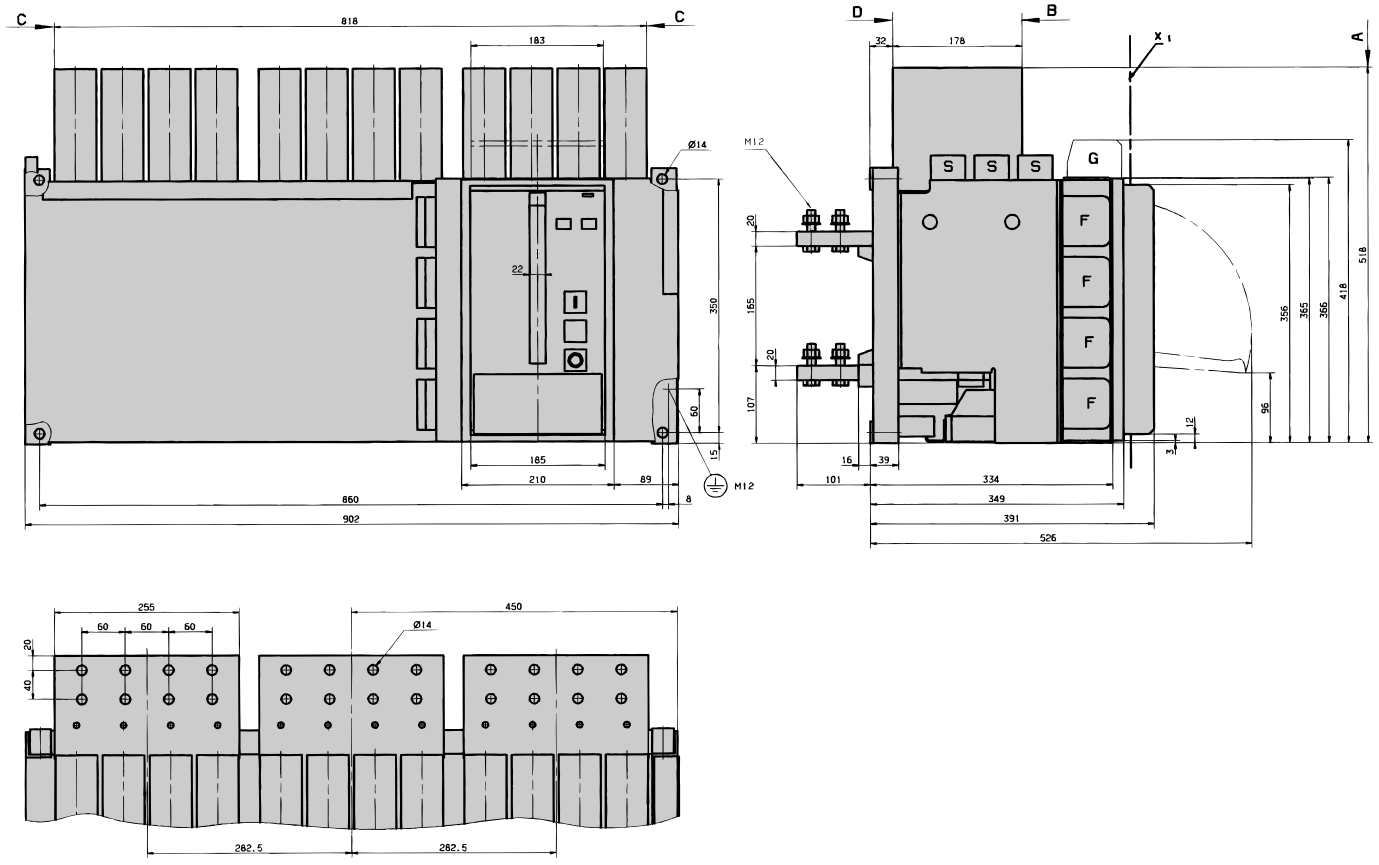
Minimum clearances of arc chute to insulated or grounded parts

Operating voltage	Range		Horizontal connections							
			Insulated parts				Grounded parts			
			A	B	C	D	A	B	C	D
AC3 ~ 415V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100
AC3 ~ 500V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100
AC3 ~ 690V	S	Icn ≤ 100 kA	250	100	100	100	250	100	100	100

Types ME5007S/6307S(1)

Horizontal connections

3-pole, frame size 60/70 - Dimensions in mm



F = Auxiliary switch
G = Automatic control unit (SU)

X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided
X2 = When punching the connecting rails, the distance from hole to beginning of the rail should amount to max. 11 mm

Safety clearances

Minimum clearances of arc chute to insulated or grounded parts

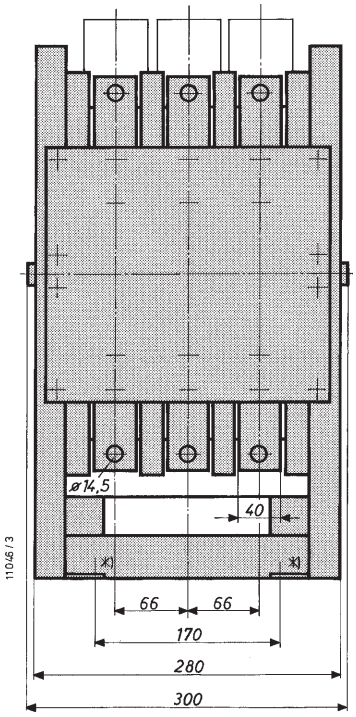
Operating voltage	Range		Horizontal connections							
			Insulated parts				Grounded parts			
			A	B	C	D	A	B	C	D
AC3 ~ 415V	S	Icn ≤ 100 kA	200	100	100	100	200	100	100	100
AC3 ~ 440V	S	Icn ≤ 100 kA	200	100	100	100	200	100	100	100
AC3 ~ 500V	S	Icn ≤ 100 kA	200	100	100	100	200	100	100	100
AC3 ~ 690V	S	Icn ≤ 100 kA	200	100	100	100	200	100	100	100

(1) ME/MET 6307S: only available with withdrawable technique.

ME07 - Overall dimensions

Type ME637 to ME1257 - Ranges N, S1, H

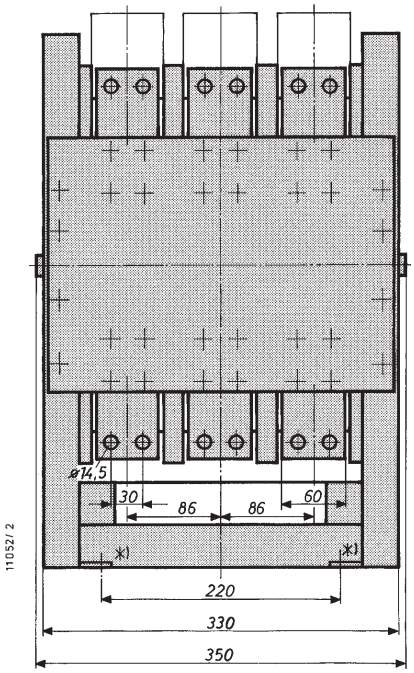
3-pole
Frame size 10, type T10v1, T10v2
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME1607 to ME2007 - Ranges N, S1, H

3-pole
Frame size 20, type T20v1, T20v2
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

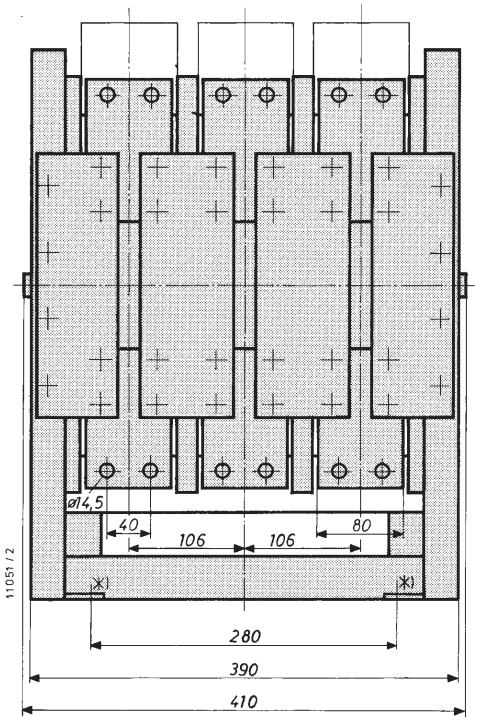


* Base fixing

ME07 - Overall dimensions

Type ME2507 - Ranges N, S1, H

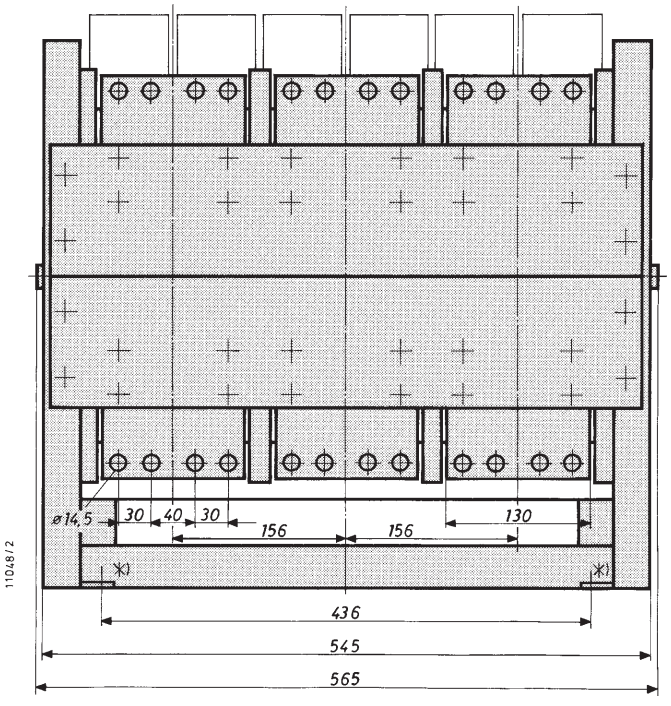
3-pole
Frame size 30, type T30v
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME3207 - Ranges N, S1, H

3-pole
Frame size 40, type T40v
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

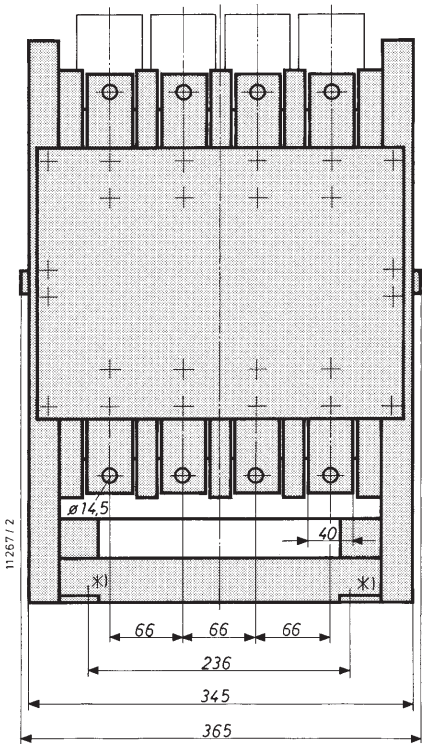


* Base fixing

ME07 - Overall dimensions

Type ME637 to ME1257 - Ranges N, S1, H/IV

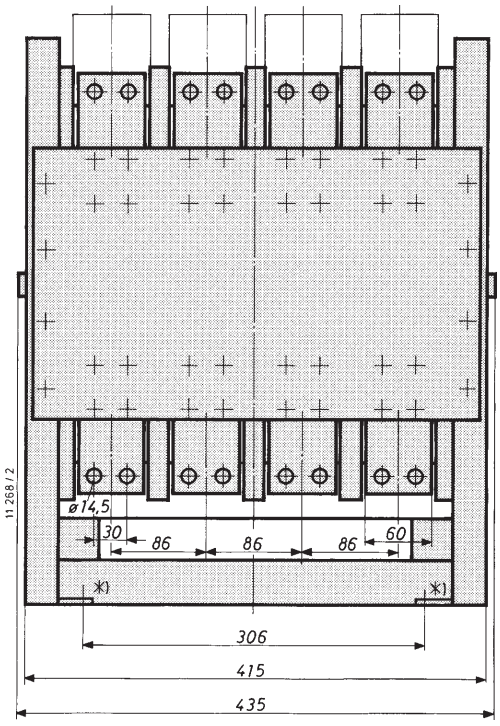
4-pole
Frame size 10/IV, type T10v1/IV, T10v2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME1607 to ME2007 - Ranges N, S1, H/IV

4-pole
Frame size 20/IV, type T20v1/IV, T20v2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

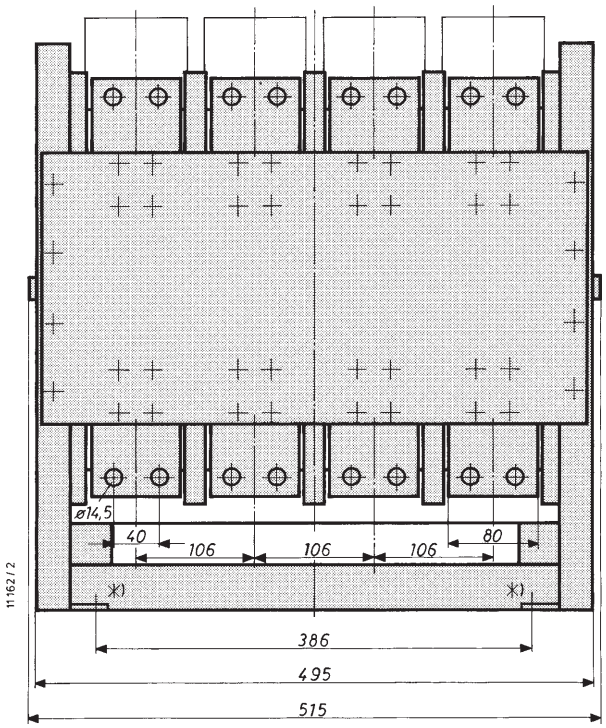


* Base fixing

Type ME2507 - Ranges N, S1, H/IV

4-pole
Frame size 30/IV, type T30v/IV
Rear view - Dimensions in mm

Safety clearance see dimensional drawings of breaker

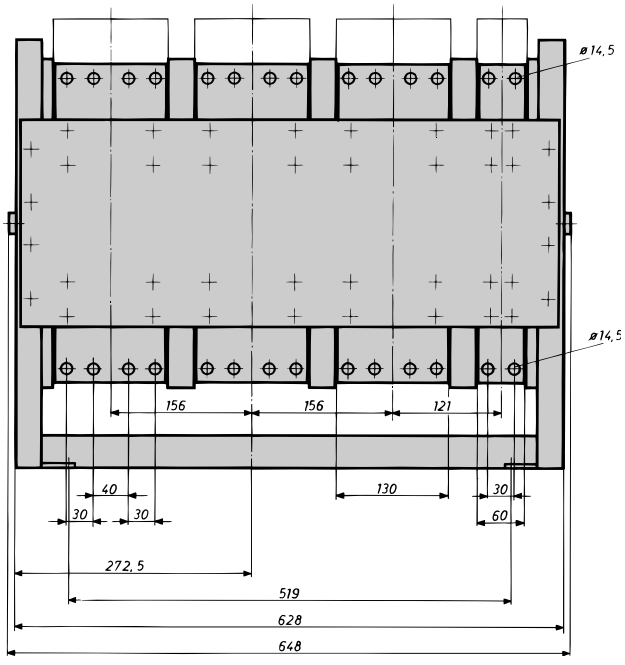


* Base fixing

Type ME3207 - Ranges S1, H/IV

4-pole
Frame size 40/IV, type T40v/IV
Rear view - Dimensions in mm

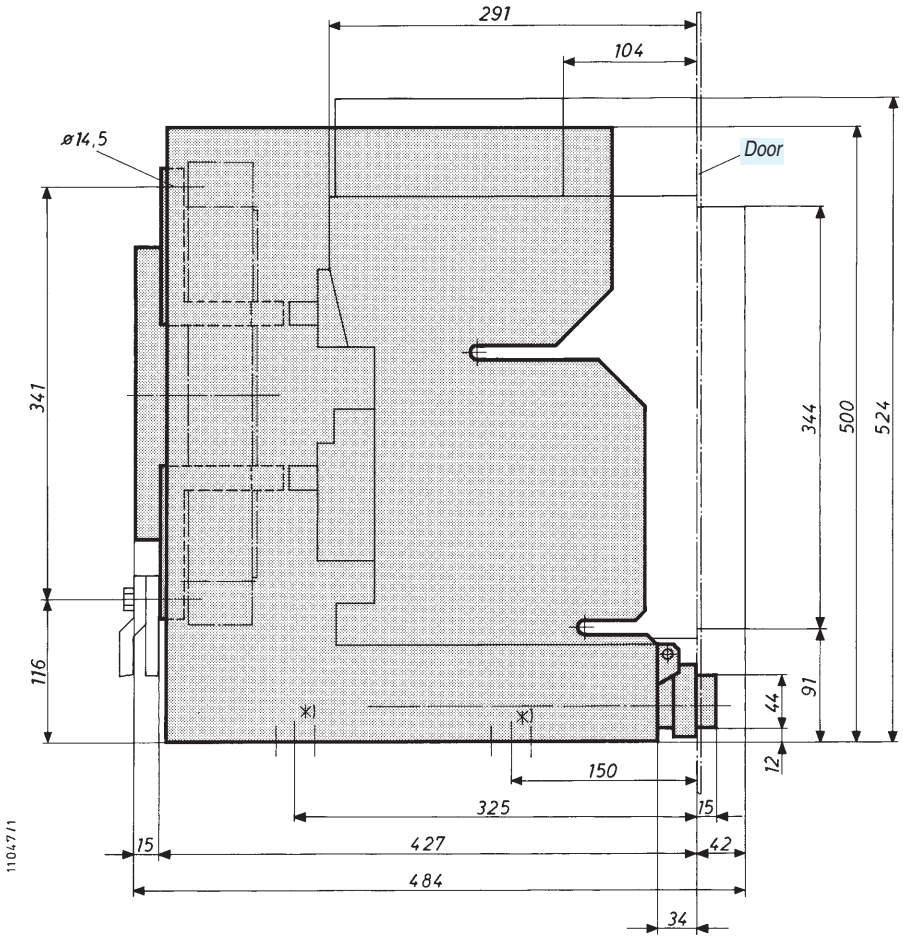
Safety clearance see dimensional drawings of breaker

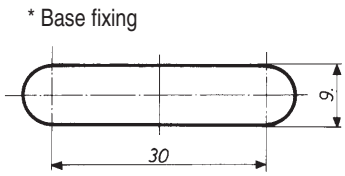


* Base fixing

Type ME637 to ME3207 - Ranges N, S1, H

Side view - Dimensions in mm

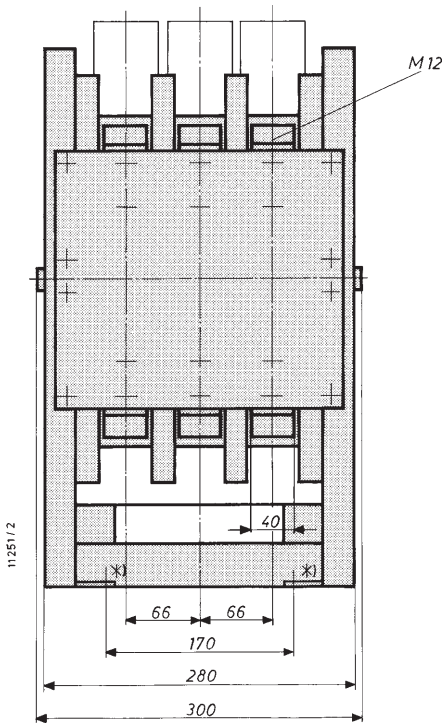




Terminal T . . . v

Type ME637 to ME1257 - Ranges N, S1, H

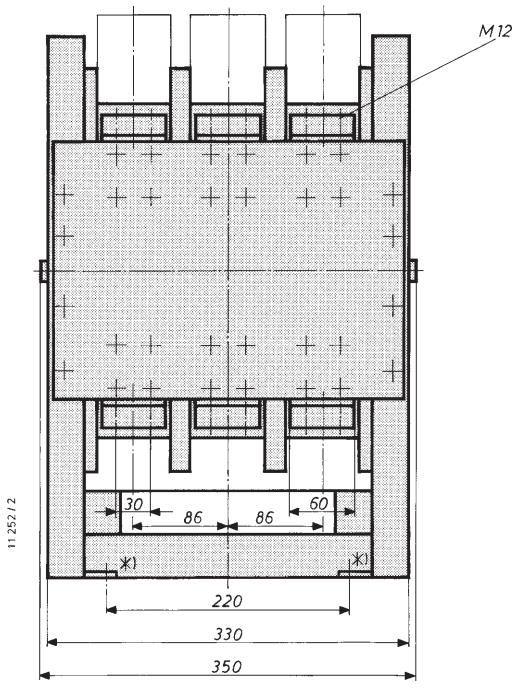
3-pole
Frame size 10, type T10w1, T10w2
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME1607 to ME2007 - Ranges N, S1, H

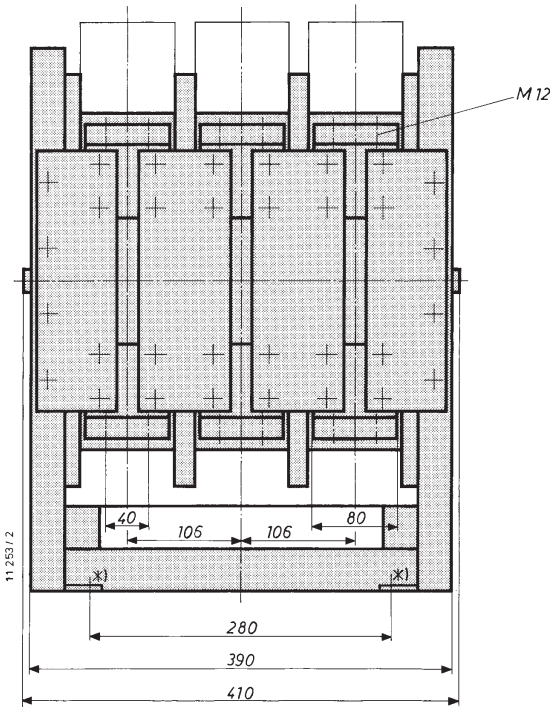
3-pole
Frame size 20, type T20w1, T20w2
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME2507 - Ranges N, S1, H

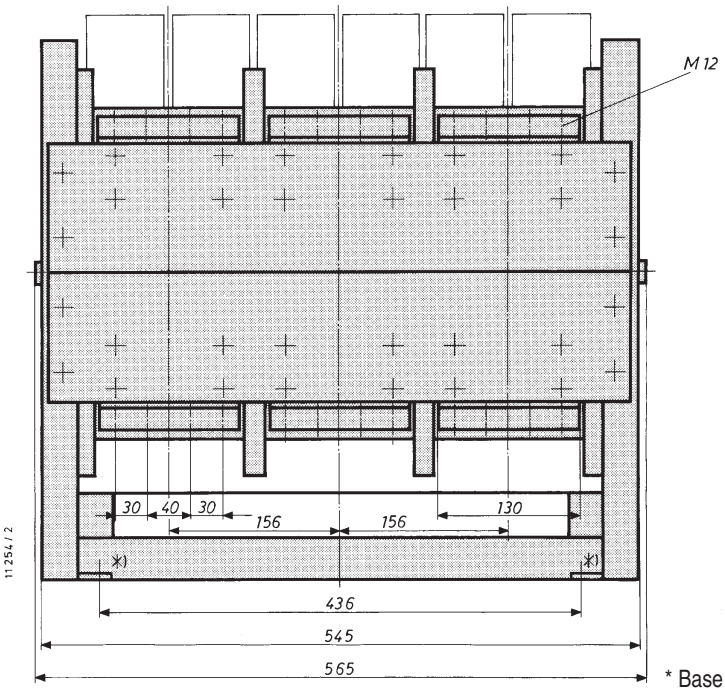
3-pole
Frame size 30, type T30w
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME3207 - Ranges N, S1, H

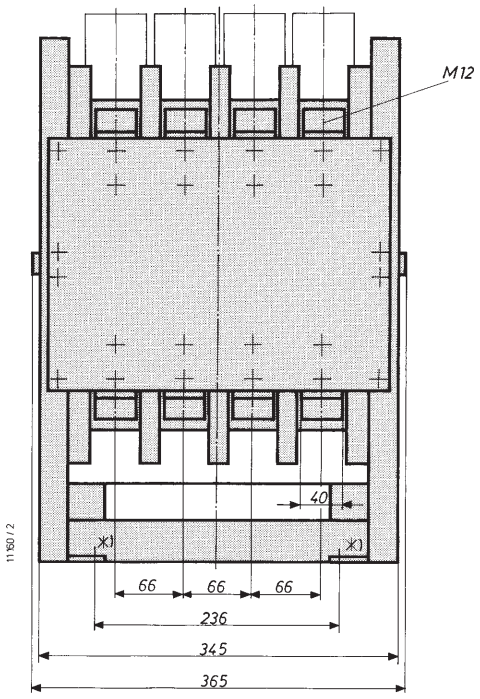
3-pole
Frame size 40, type T40w
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME637 to ME1257 - Ranges N, S1, H/IV

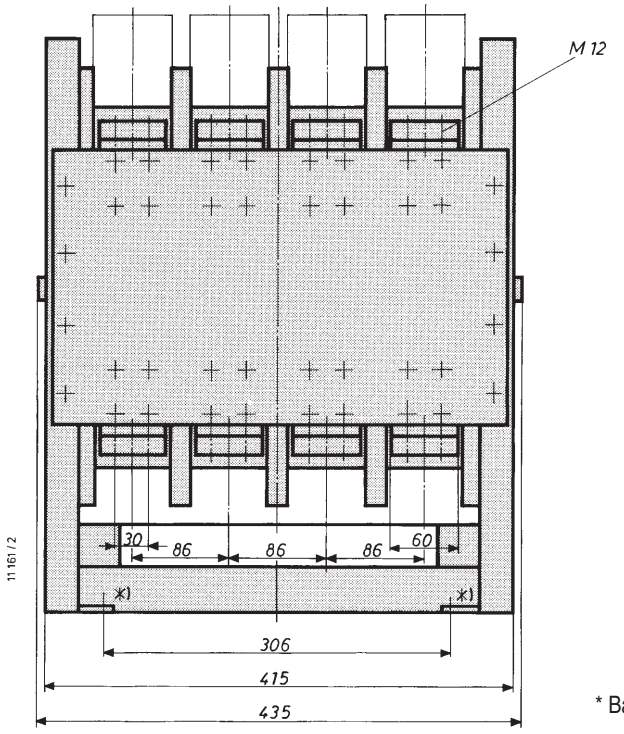
4-pole
Frame size 10/IV, type T10w1/IV, T10w2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME1607 to ME2007 - Ranges N, S1, H/IV

4-pole
Frame size 20/IV, type T20w1/IV, T20w2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

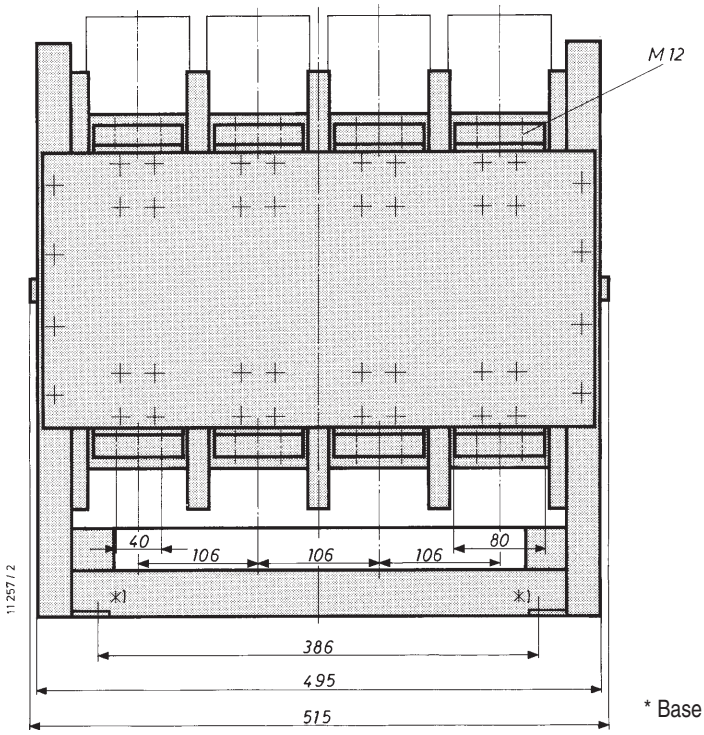


* Base fixing

ME07 - Overall dimensions

Type ME2507 - Ranges N, S1, H/IV

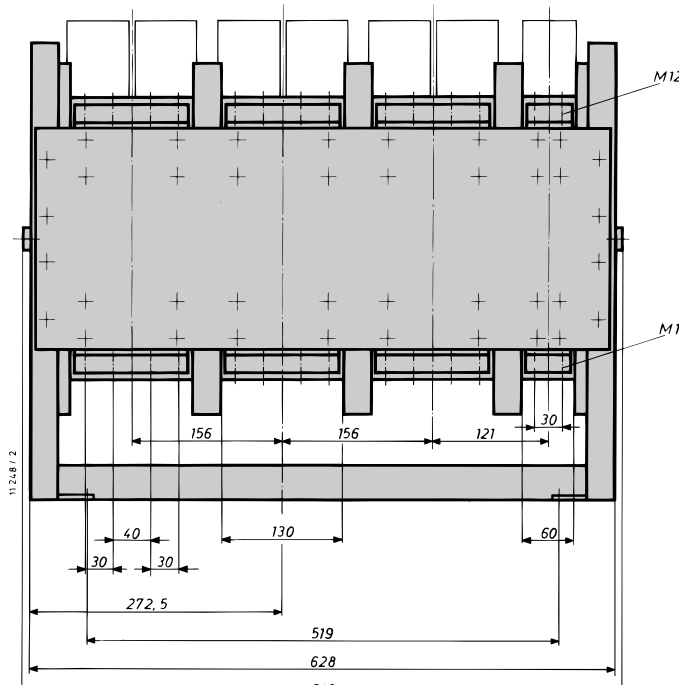
4-pole
Frame size 30/IV, type T30w/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME3207 - Ranges S1, H/IV

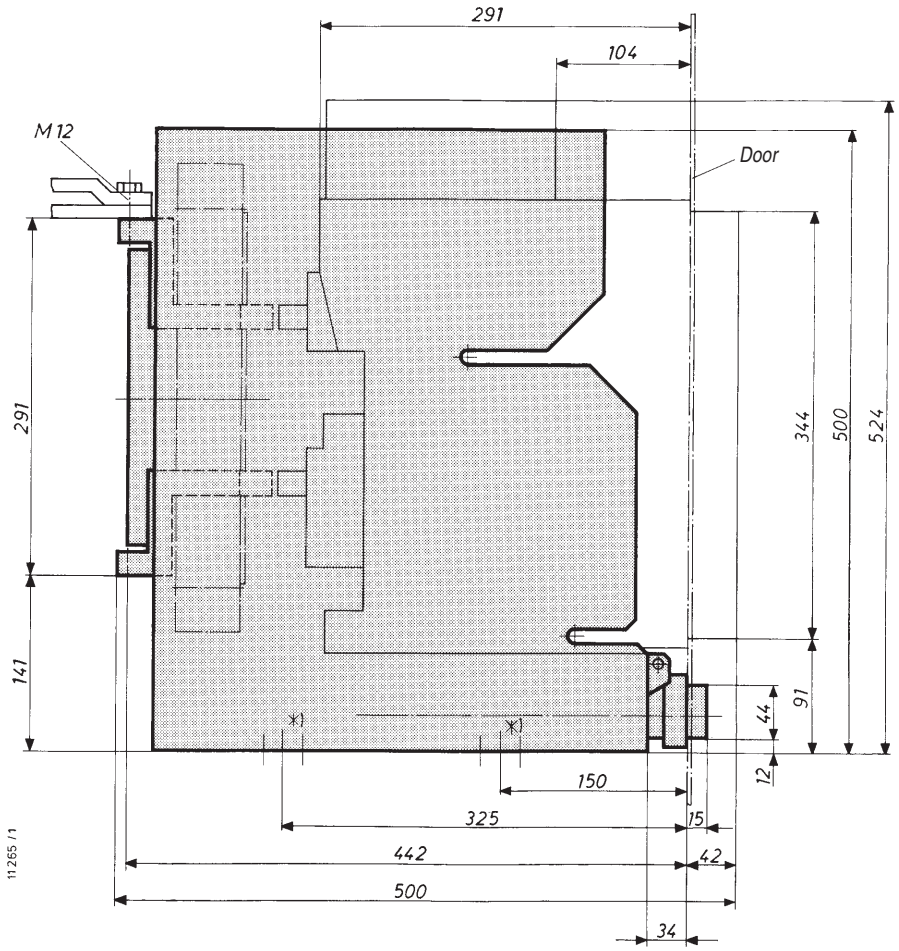
4-pole
Frame size 40/IV, type T40w/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

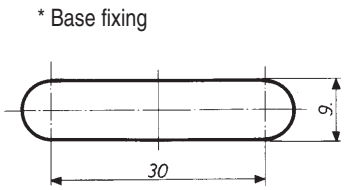


* Base fixing

Type ME637 to ME3207 - Ranges N, S1, H

Side view - Dimensions in mm



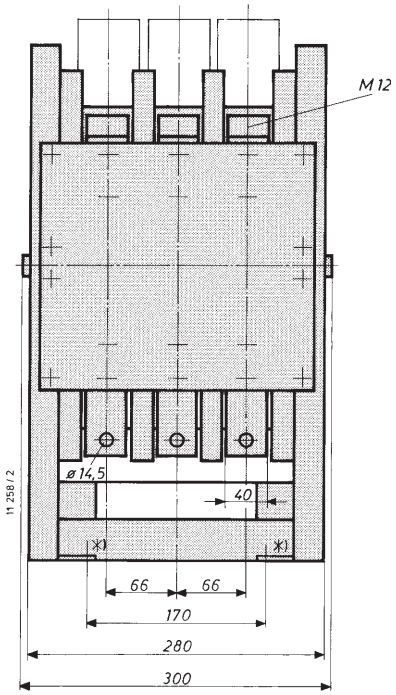


Terminal T . . . w

ME07 - Overall dimensions

Type ME637 to ME1257 - Ranges N, S1, H

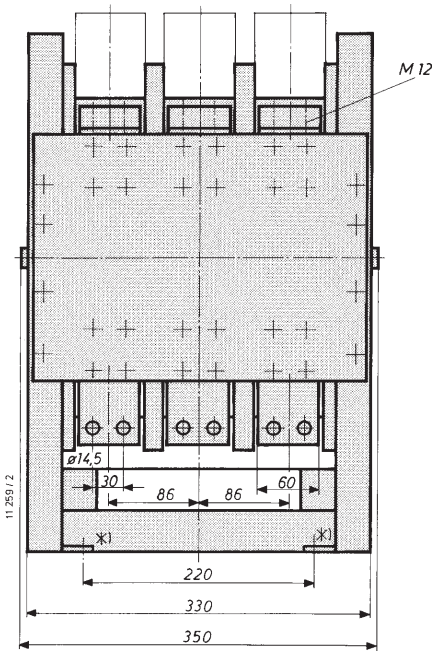
3-pole
Frame size 10, type T10k1, T10k2
Rear view - Dimensions in mm
Safety clearance see dimensions drawings of breaker



* Base mounting

Type ME1607 to ME2007 - Ranges N, S1, H

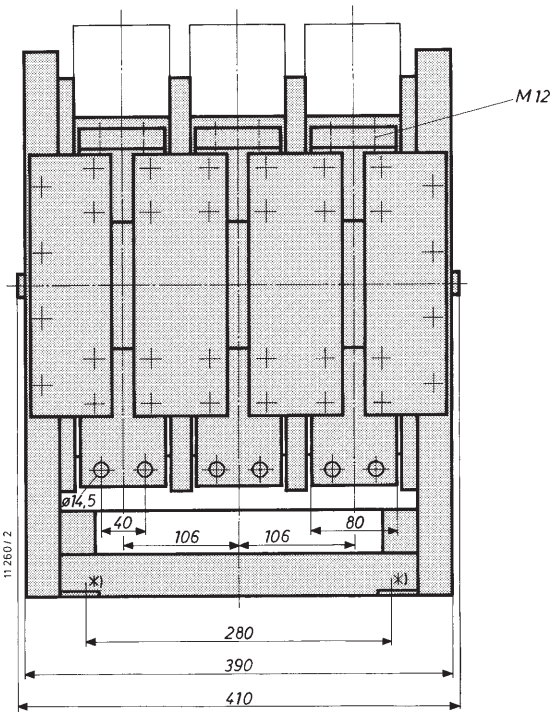
3-pole
Frame size 20, type T20k1, T20k2
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base mounting

Type ME2507 - Ranges N, S1, H

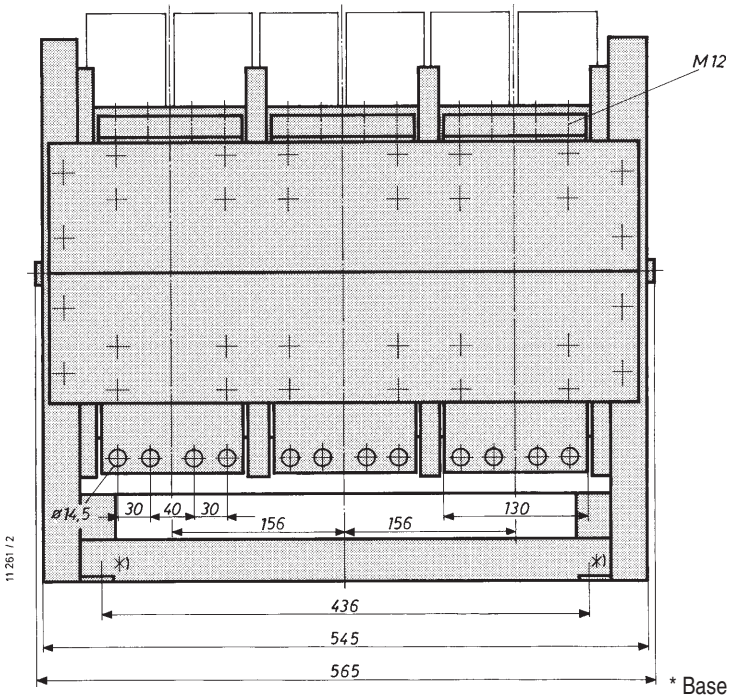
3-pole
Frame size 30, type T30k
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME3207 - Ranges N, S1, H

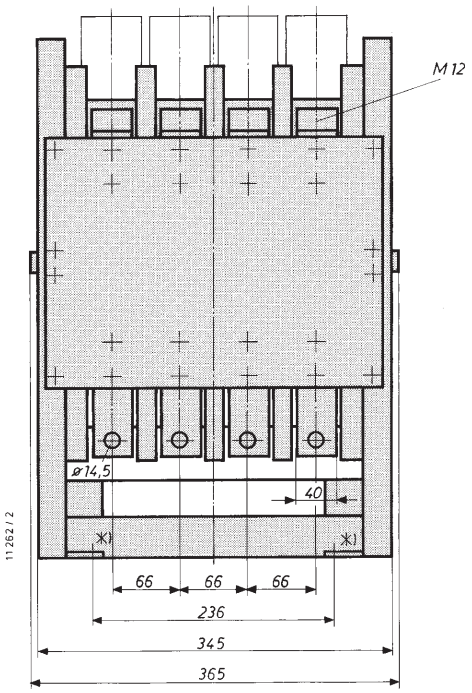
3-pole
Frame size 40, type T40k
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME637 to ME1257 - Ranges N, S1, H/IV

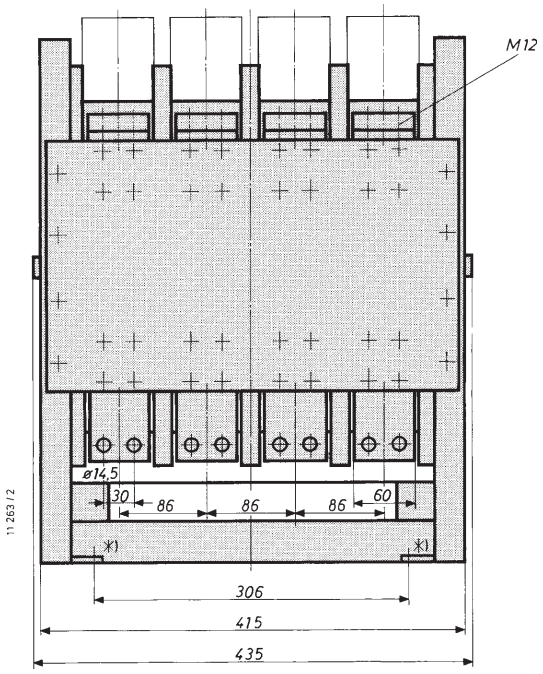
4-pole
Frame size 10/IV, type T10k1/IV, T10k2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME1607 to ME2007 - Ranges N, S1, H/IV

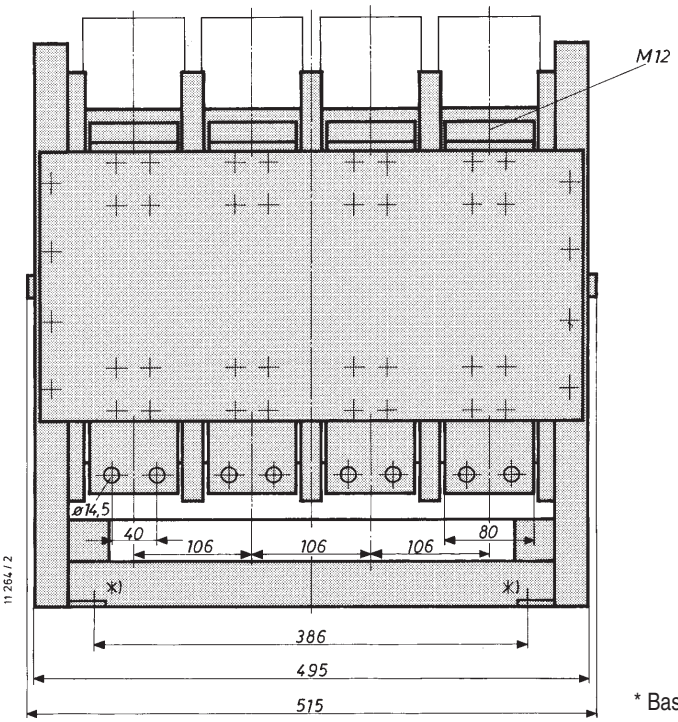
4-pole
Frame size 20/IV, type T20k1/IV, T20k2/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME2507 - Ranges N, S1, H/IV

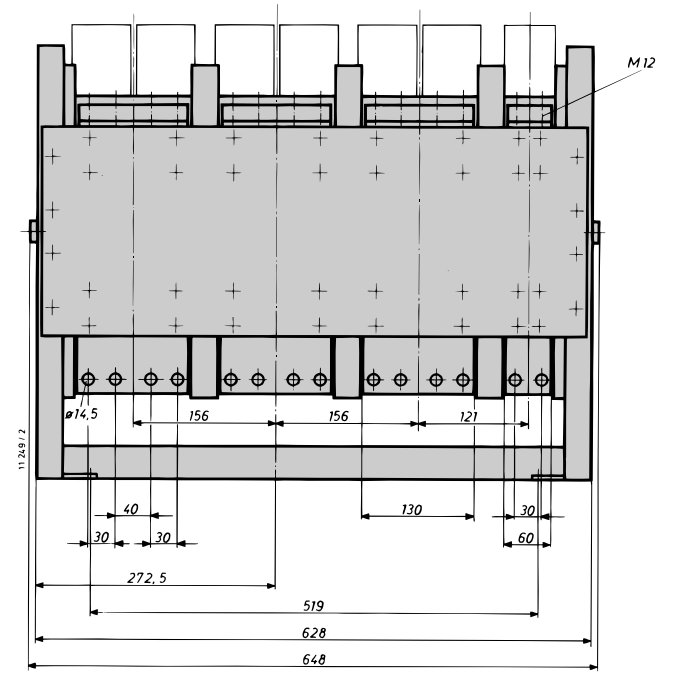
4-pole
Frame size 30/IV, type T30k/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker



* Base fixing

Type ME3207 - Ranges S1, H/IV

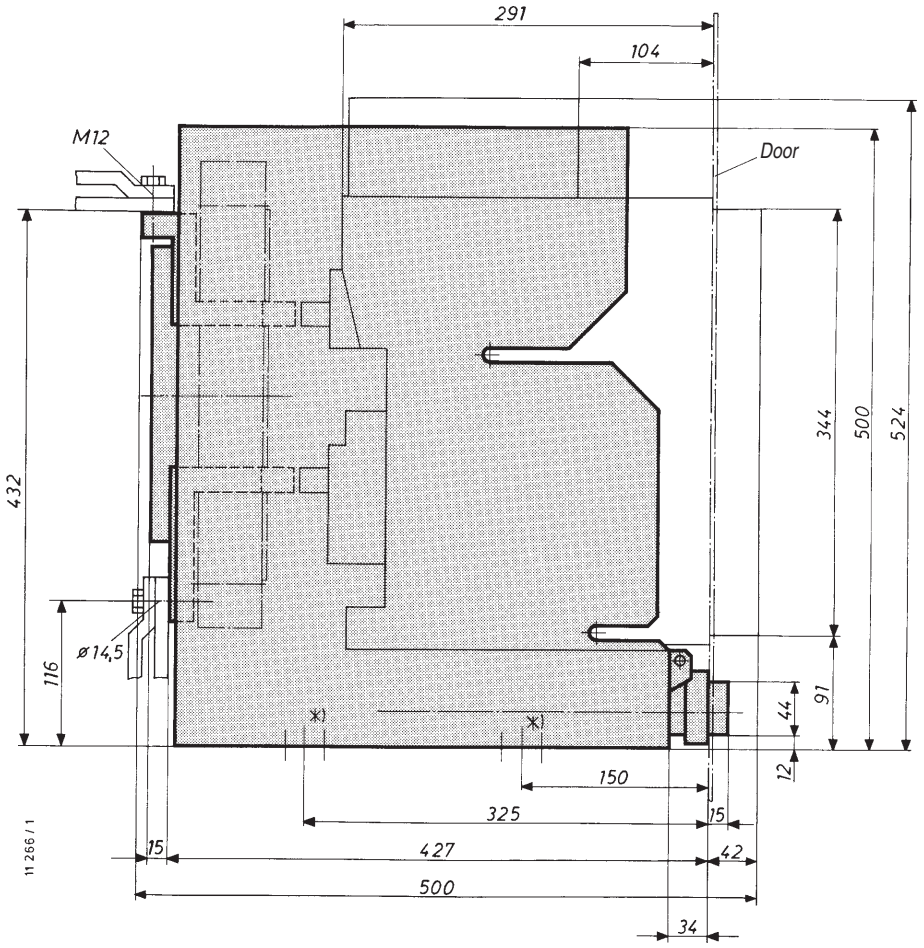
4-pole
Frame size 40/IV, type T40k/IV
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

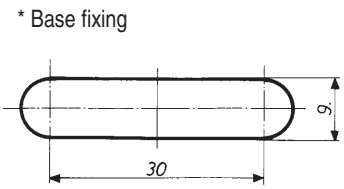


* Base fixing

Type ME637 to ME3207 - Ranges N, S1, H

Side view - Dimensions in mm





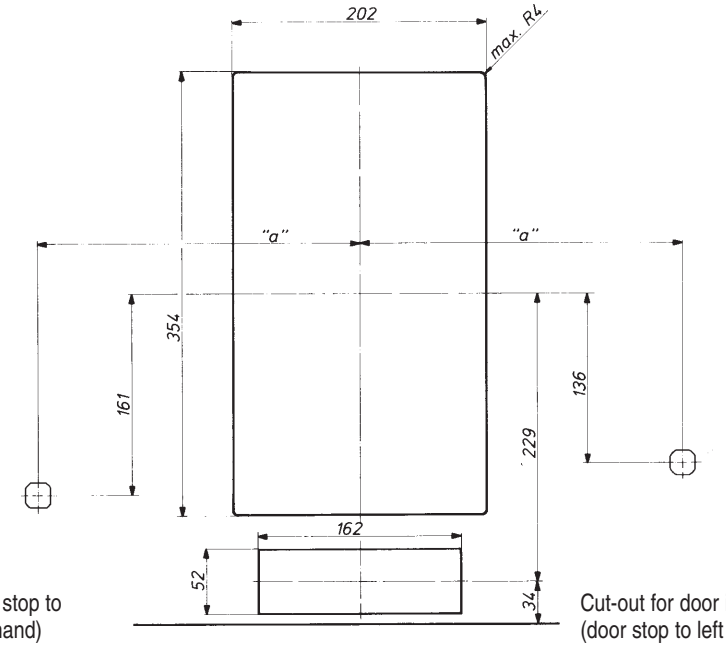
Terminal T . . . k

Door cut-outs

Frame size 10 ... 40 3-pole / Frame size 10 ... 30 4-pole - Dimensions in mm

Frame size Withdrawable technique	10	20	30	40
Dimension “a”	124 (157)	149 (193)	179 (232)	257

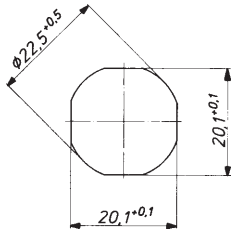
4-pole withdrawable technique between brackets



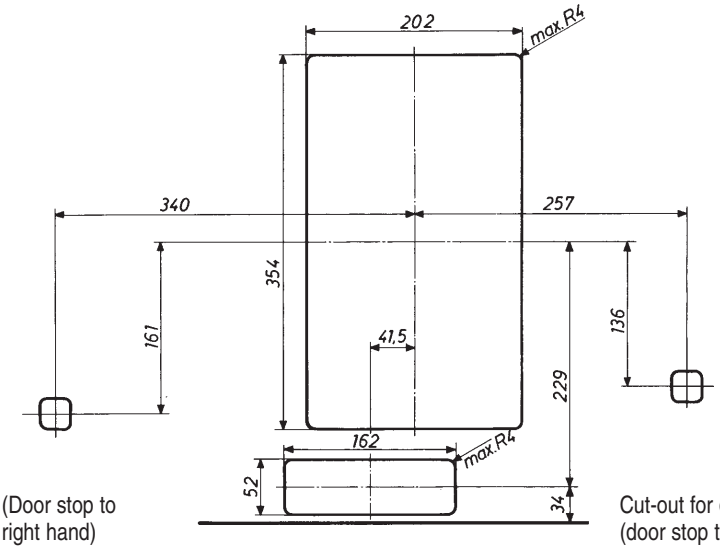
(Door stop to right hand)

Cut-out for door interlock (door stop to left hand)

Bottom edge of cradle



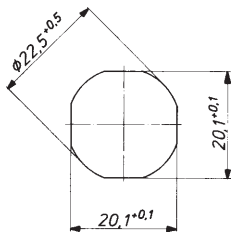
Frame size 40 4-pole - Dimensions in mm



(Door stop to right hand)

Cut-out for door interlock (door stop to left hand)

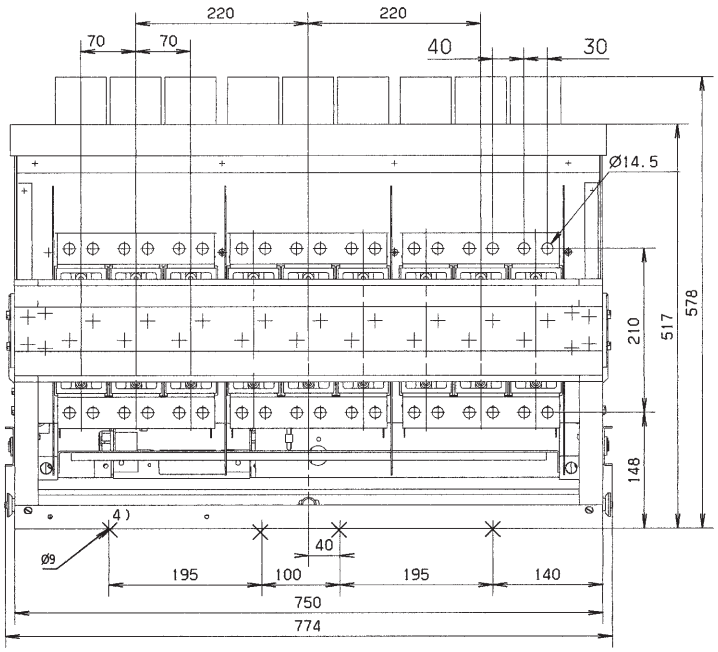
Bottom edge of cradle



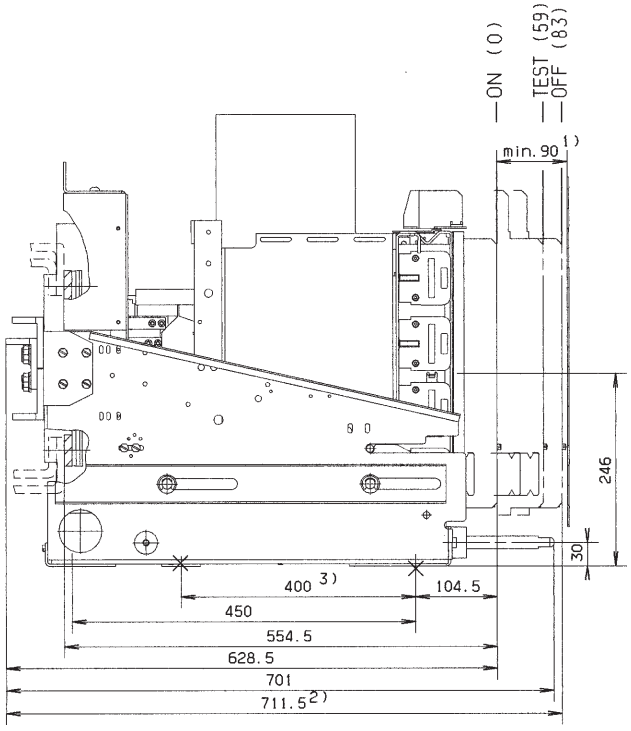
ME07 - Overall dimensions

Type ME4007 S

3-pole
Frame size 50, type T50
Rear view - Dimensions in mm
Safety clearance see dimensions drawings of breaker



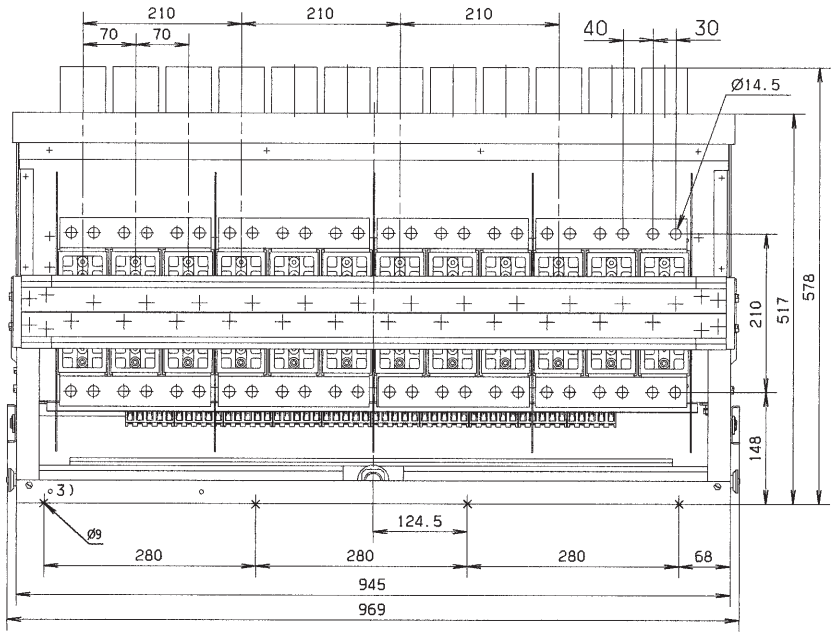
1. With closed door draw-out feature door sealing frame required
2. In position OFF
3. Version with vertical terminals



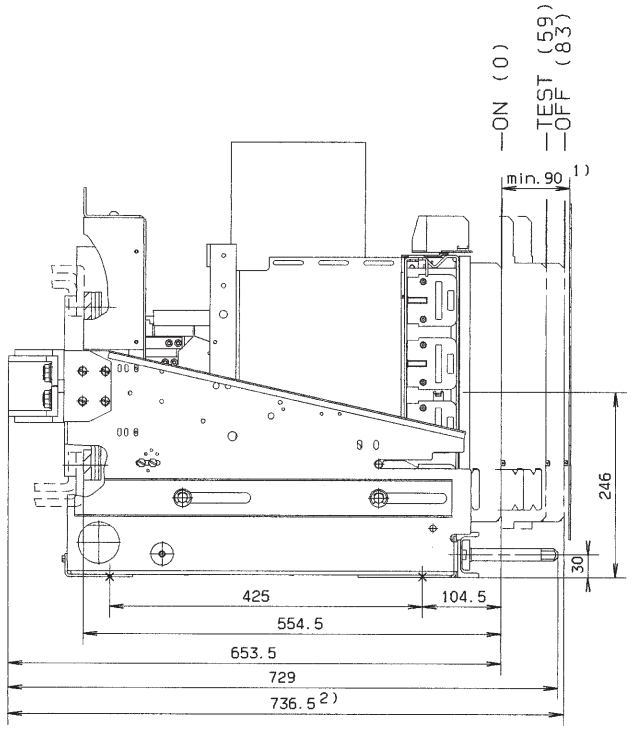
ME07 - Overall dimensions

Type ME4007 S/IV

4-pole
Frame size 50, type T50/IV
Rear view - Dimensions in mm
Safety clearance see dimensions drawings of breaker



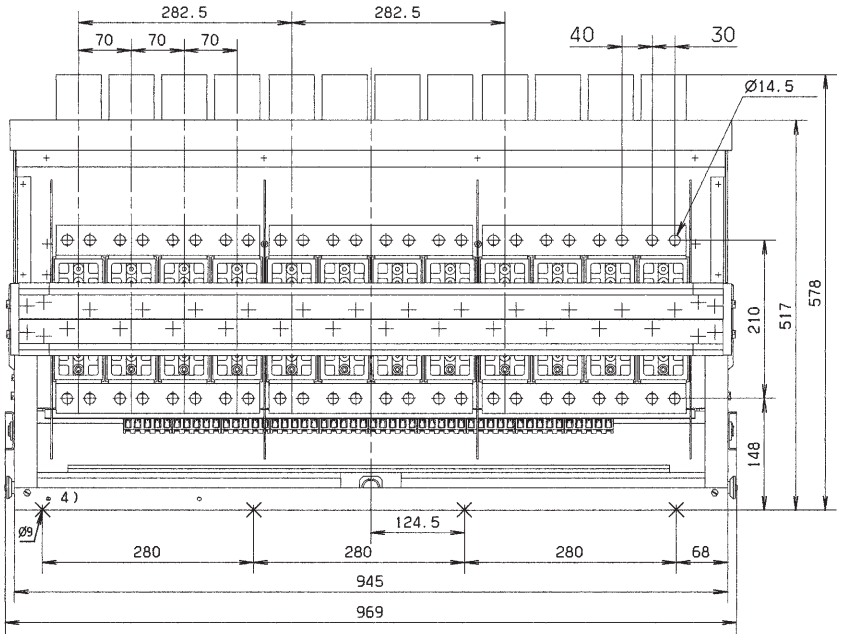
1. With closed door draw-out feature door sealing frame required
2. In position OFF



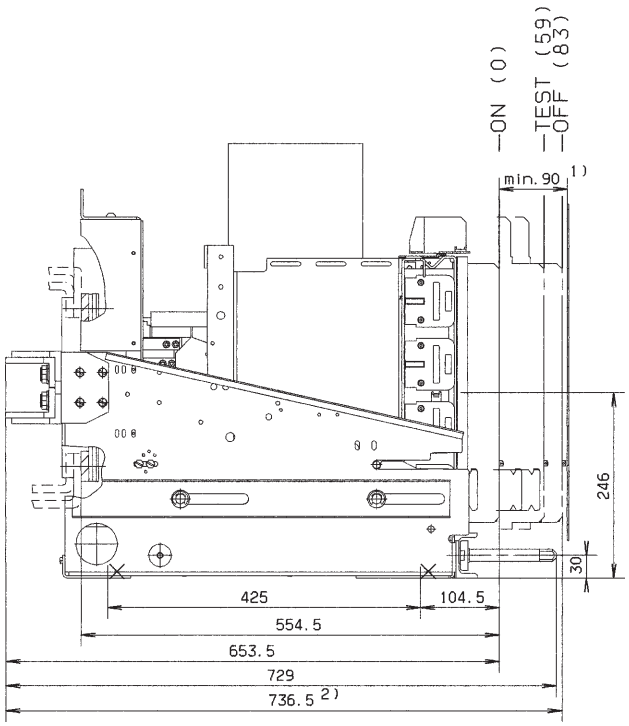
ME07 - Overall dimensions

Type ME5007 S

3-pole
Frame size 60, type T60
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

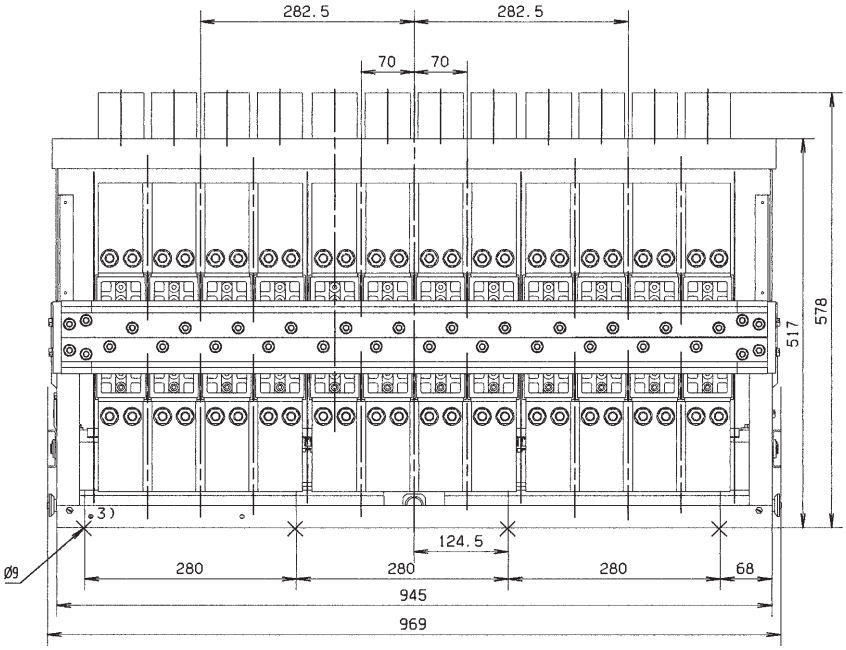


1. With closed door draw-out feature door sealing frame required
2. In position OFF

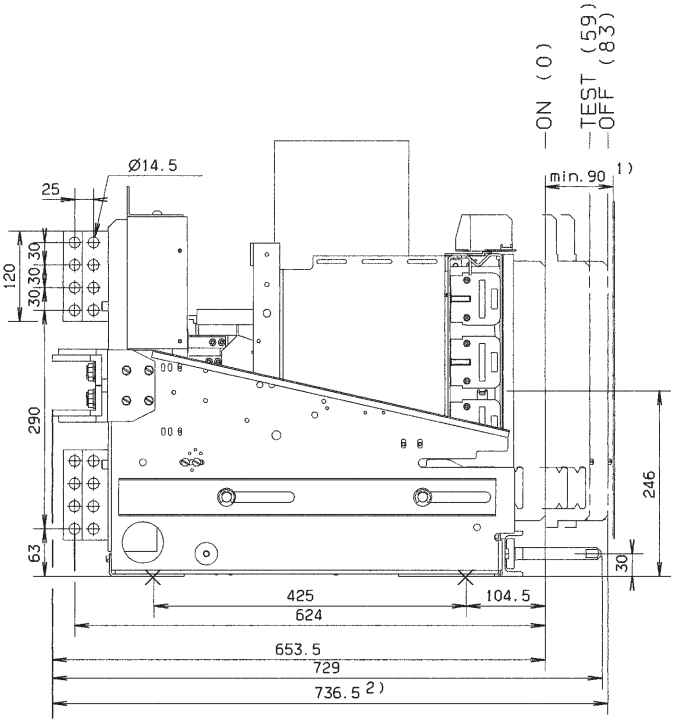


Type ME6307 S

3-pole
Frame size 70, type T70
Rear view - Dimensions in mm
Safety clearance see dimensional drawings of breaker

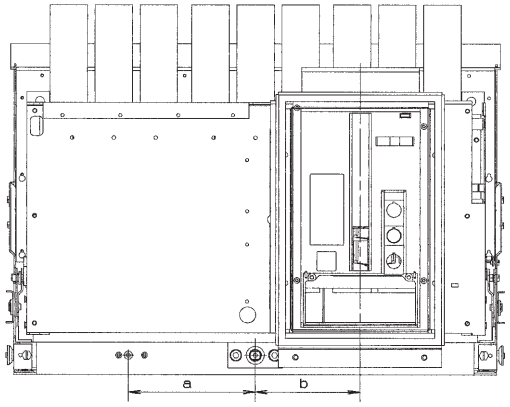


1. With closed door draw-out feature door sealing frame required
2. In position OFF



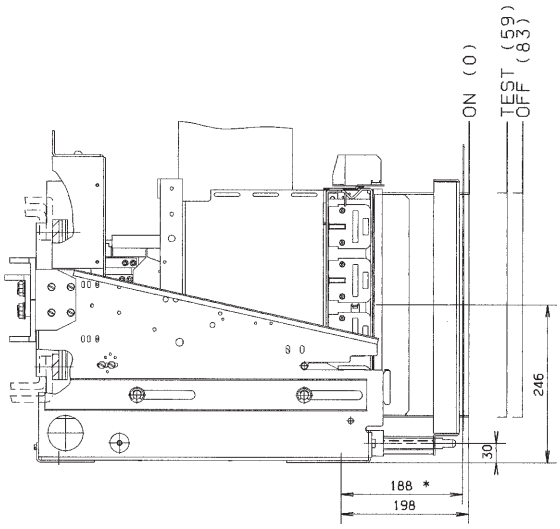
Type ME4007 to ME6307

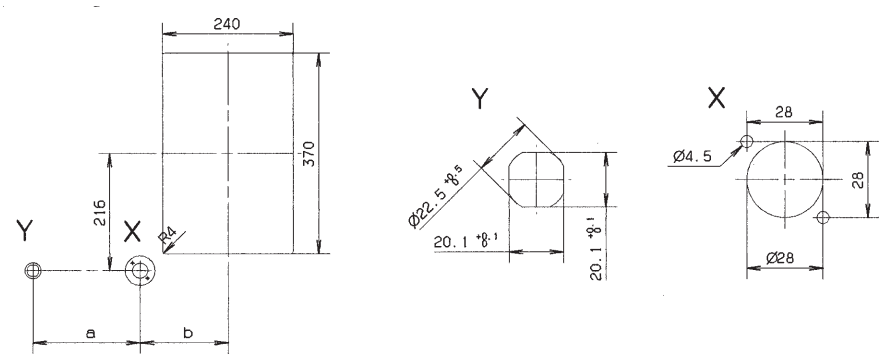
Door cut-outs
Frame size 50 to 70



Frame size Withdrawable technique	50	50/4	60/70
Dimension “a” Dimension “b”	197 163	297 258	297 258

* Inside door

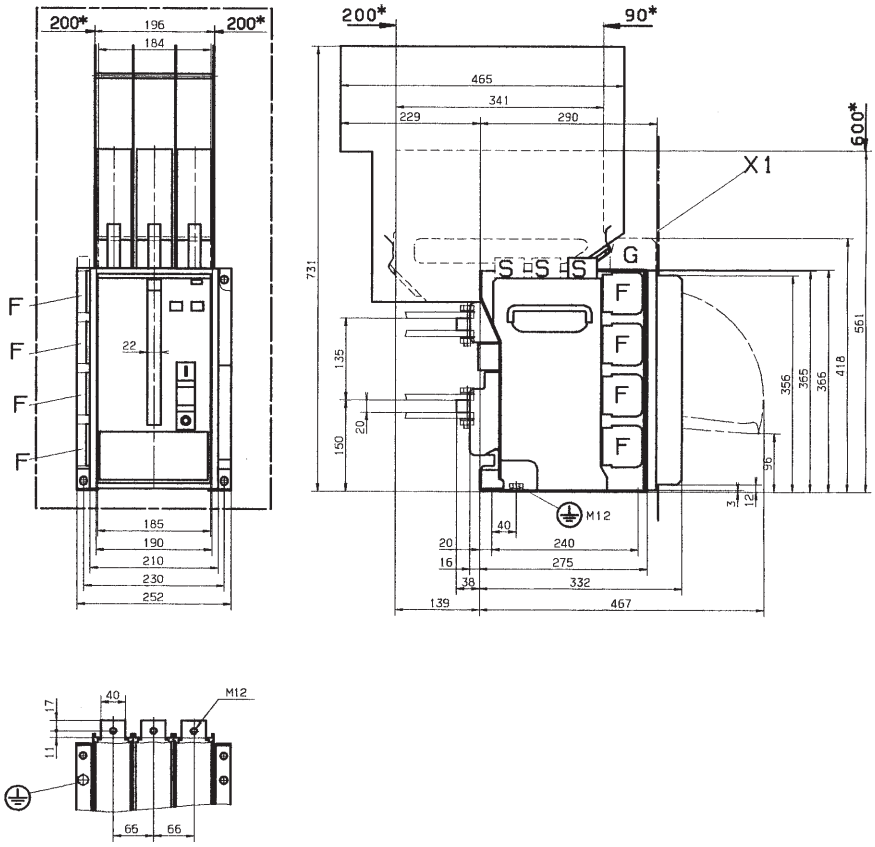




Type ME637 to ME1257H

1000V AC

3-pole, frame size 10



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

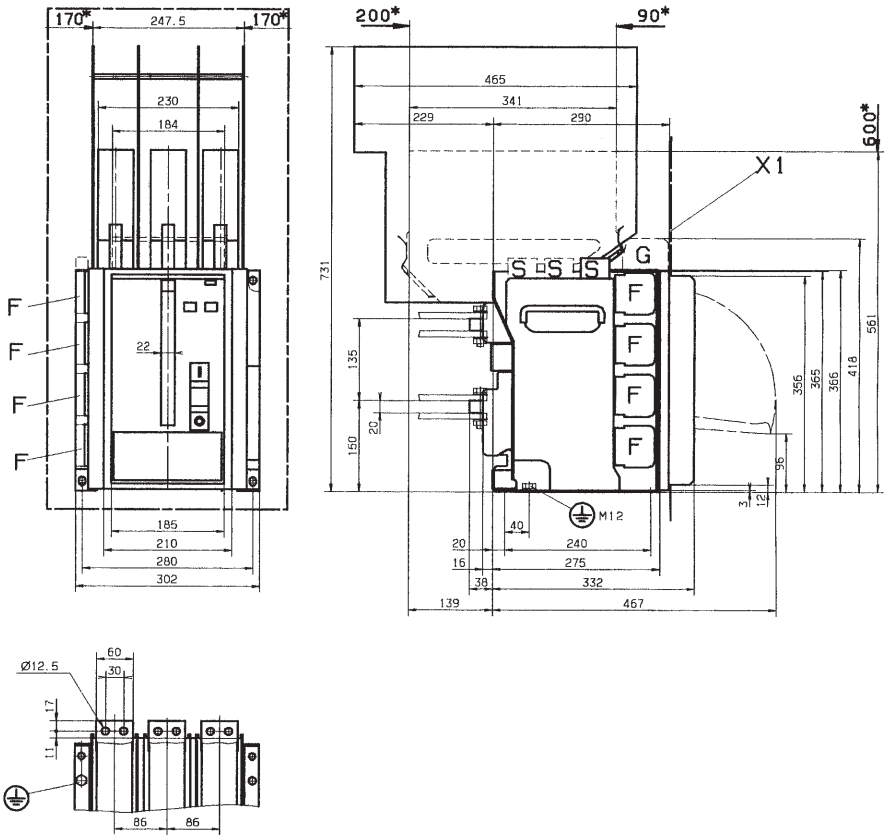
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type ME1607 to ME2007H

1000V AC

3-pole, frame size 20



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

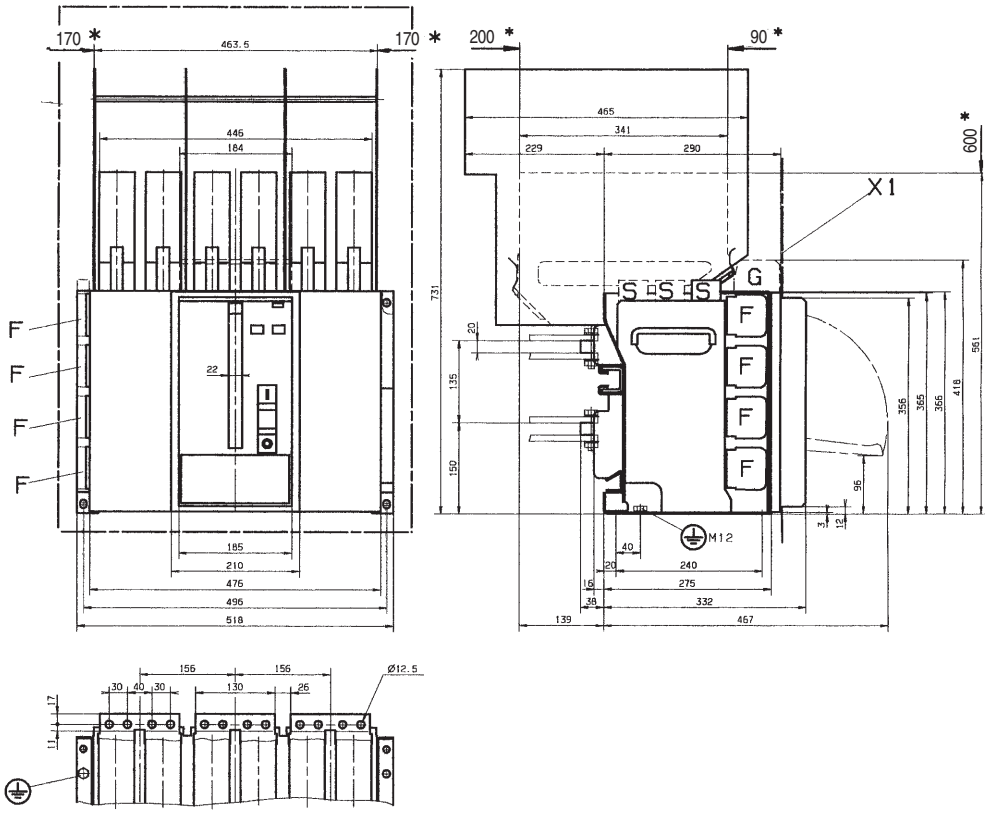
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type ME3207H

1000V AC

3-pole, frame size 40



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

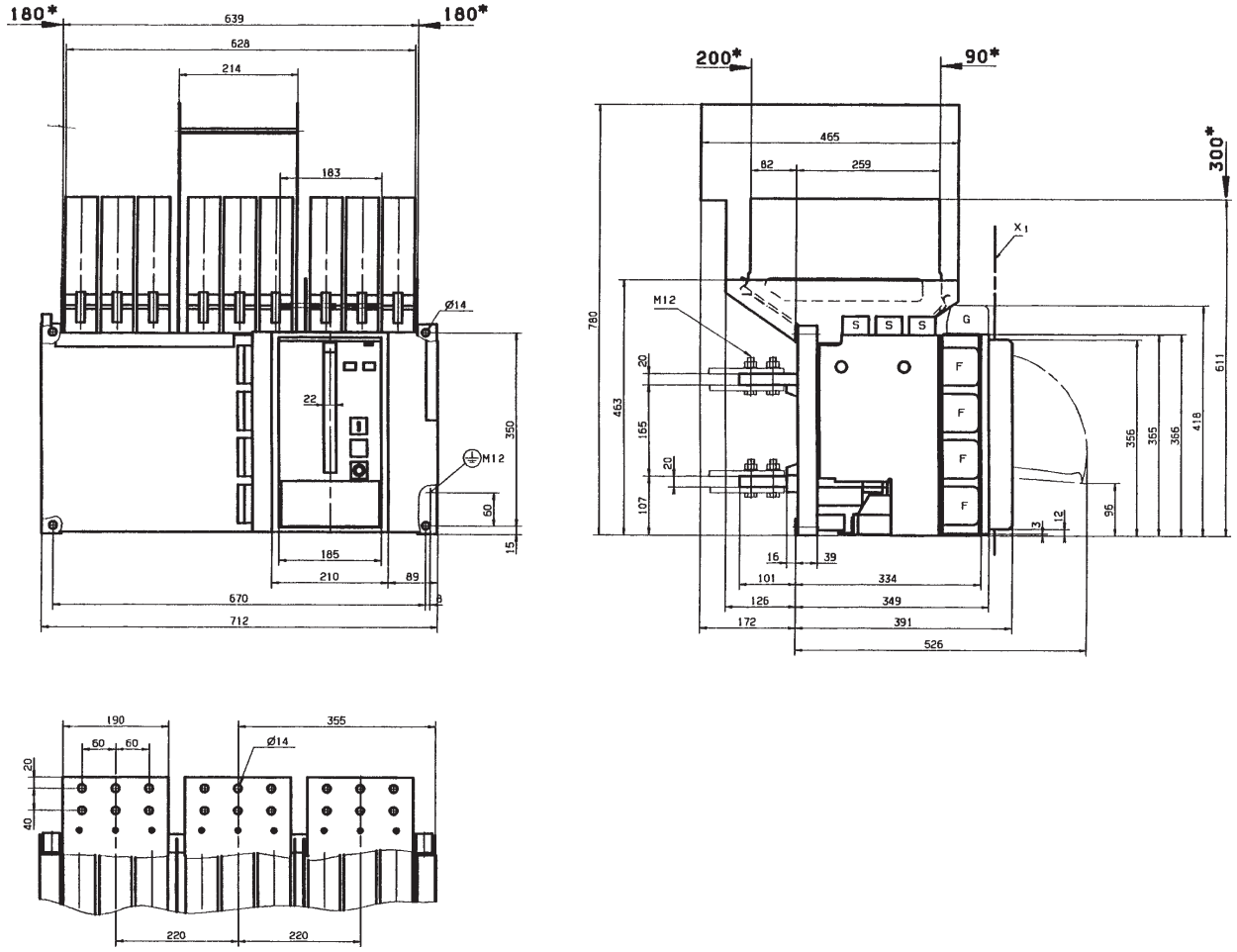
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type ME4007S

1000V AC

3-pole, frame size 50



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

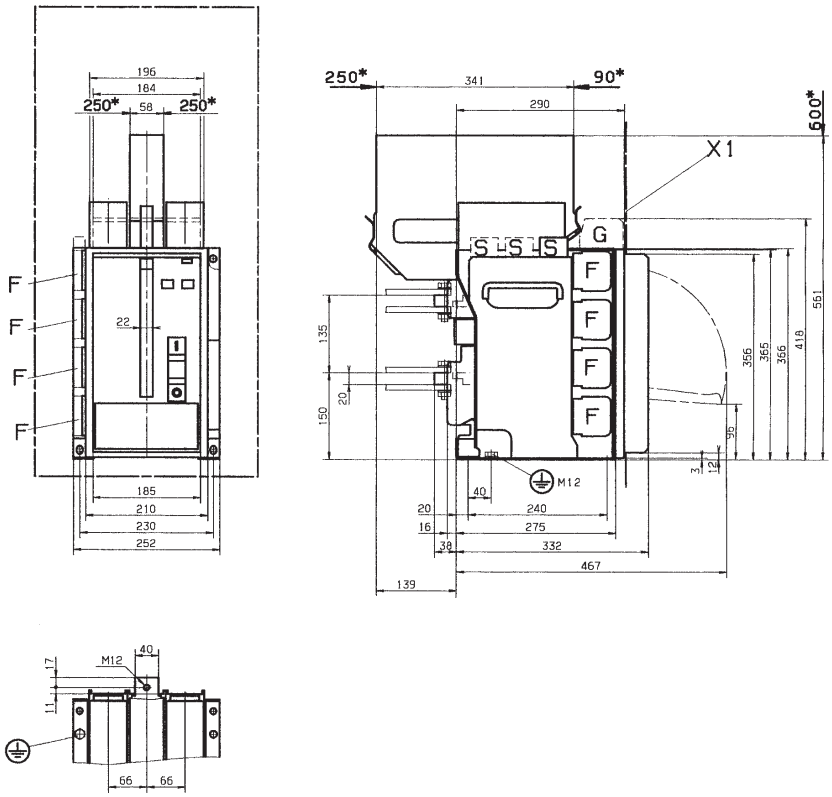
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with rear mounting.

Type MEG1257

1200V DC

1-pole, frame size 10



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

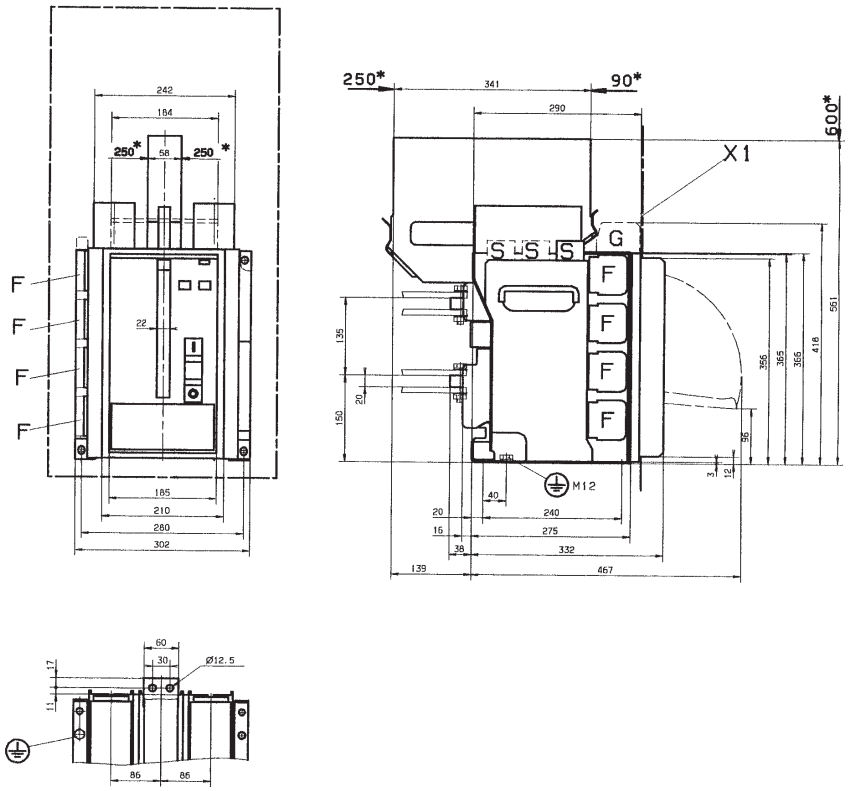
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG2007

1200V DC

1-pole, frame size 20



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

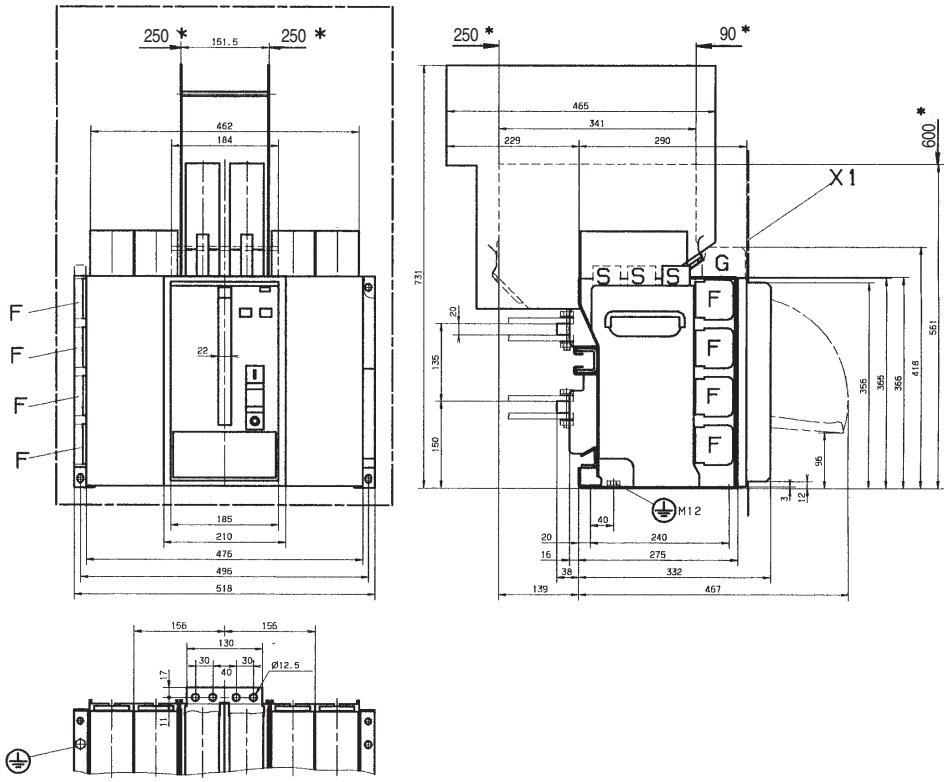
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG3207

1200V DC

1-pole, frame size 40



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

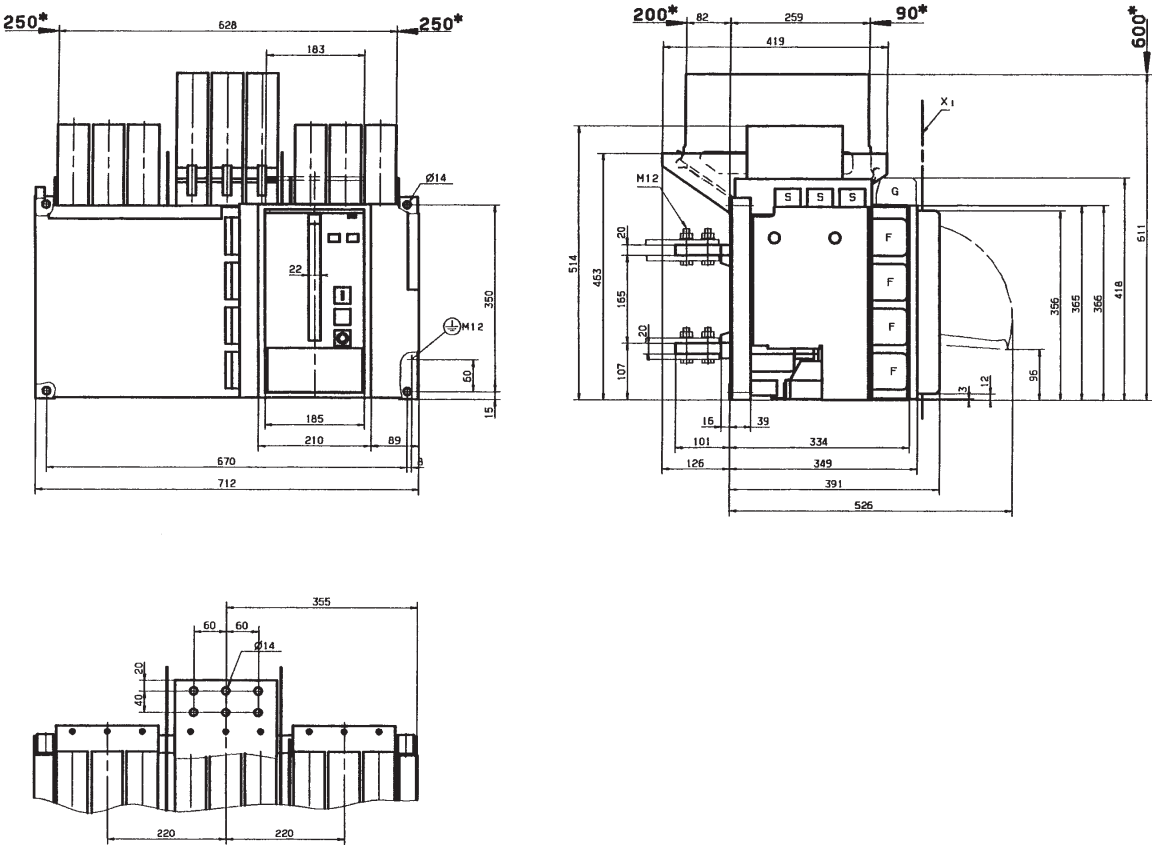
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG4007

1200V DC

1-pole, frame size 50



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

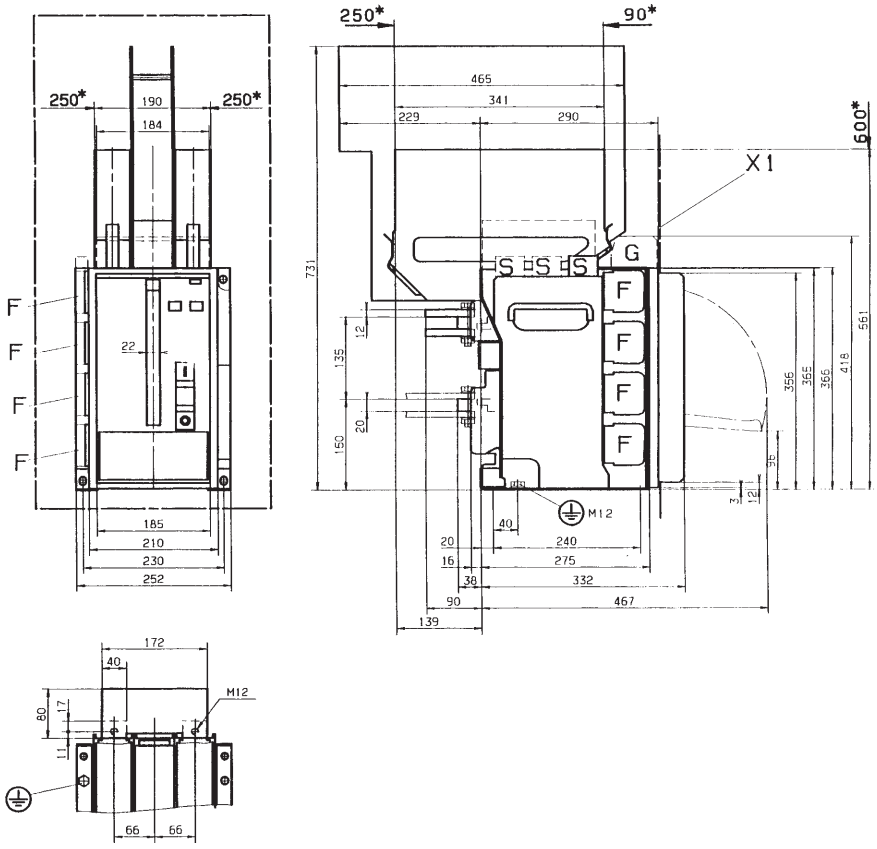
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with rear mounting.

Type MEG1257

1500V DC

1-pole, frame size 10



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

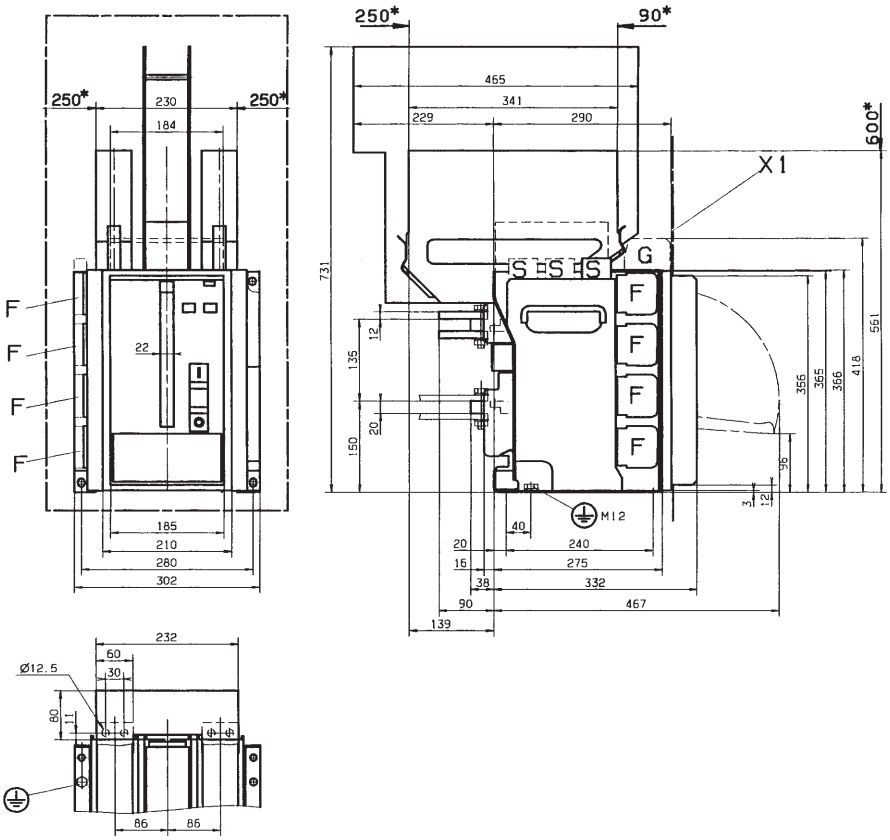
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG2007

1500V DC

1-pole, frame size 20



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

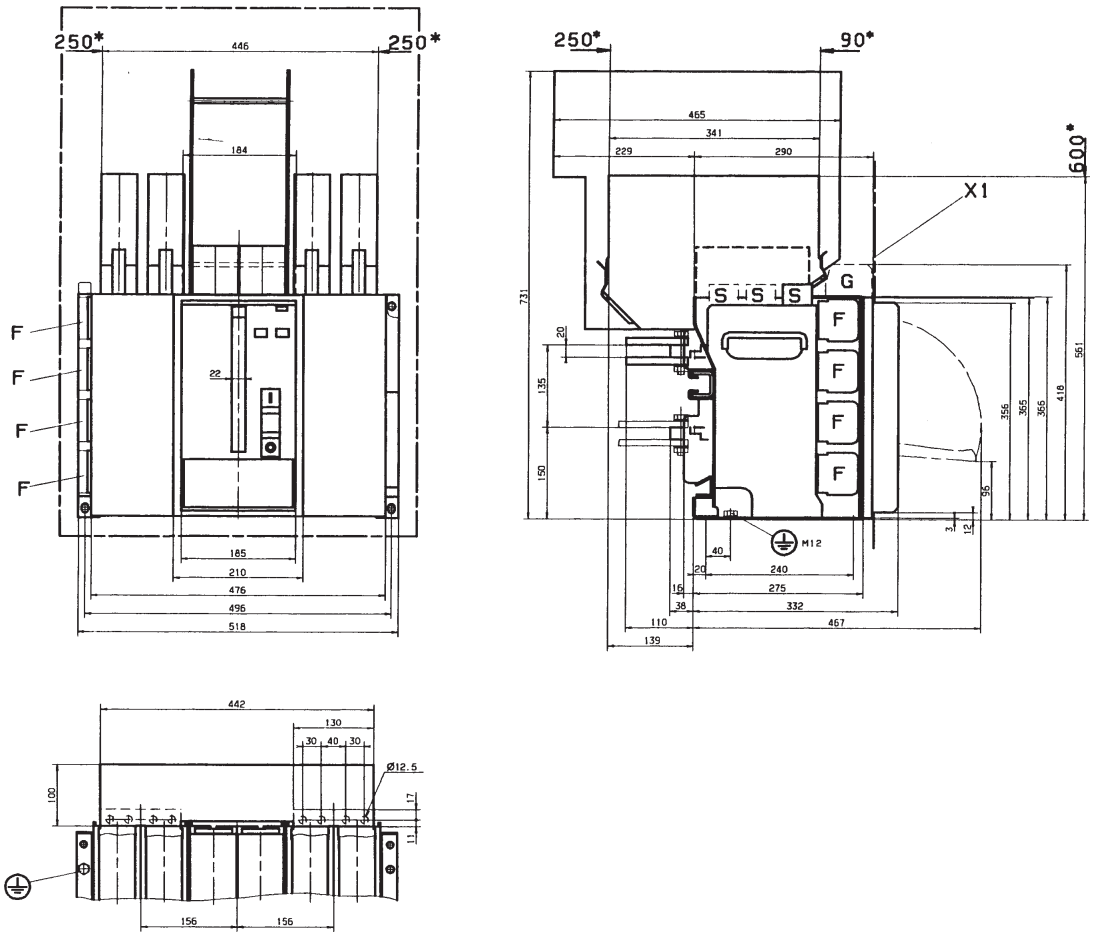
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG3207

1500V DC

1-pole, frame size 40



F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

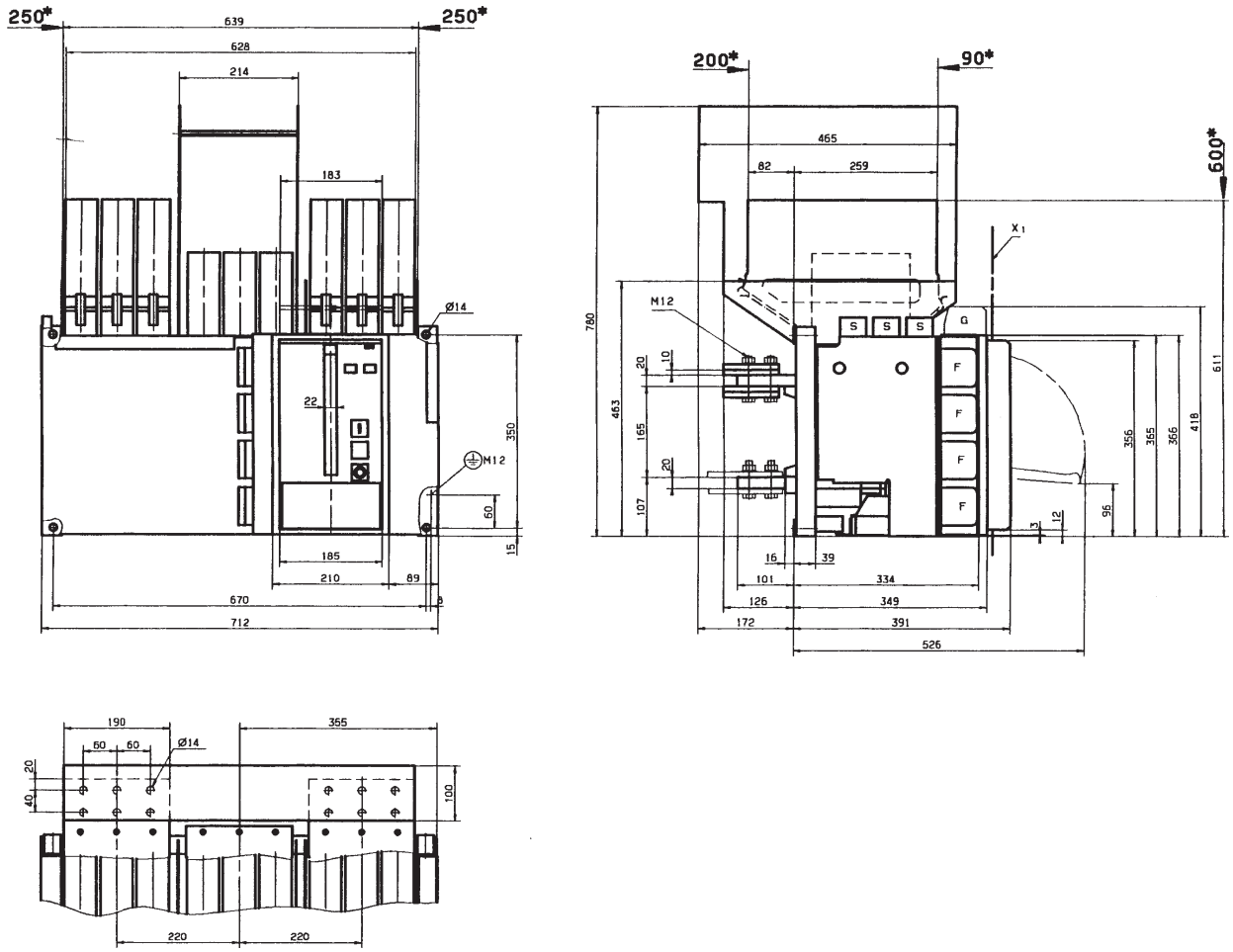
*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

Only fixed version with base mounting.

Type MEG4007

1500V DC

1-pole, frame size 50



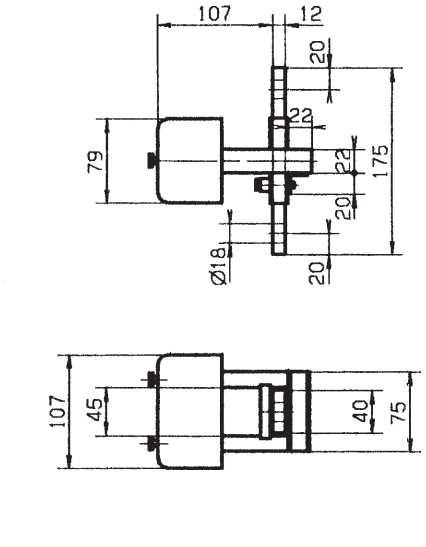
F = Auxiliary switch
G = Automatic control unit (SU)
X1 = Switch cabinet door; if not available, a cover which protects the operator must be provided

*) Safety clearances
Minimum clearances of arc chutes to insulated or grounded parts.
Clearances to front and back are valid only for insulated parts.

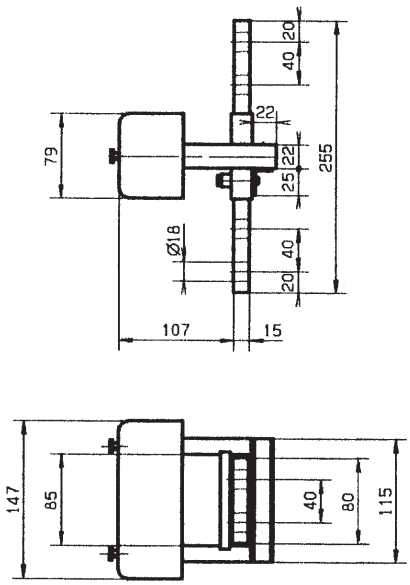
Only fixed version with rear mounting.

Type MEG07

External overcurrent release



For rated current 630-1250A



For rated current 1800-3600A

AEG *Low Voltage*