

Moulded Case Circuit Breakers **Ex9M SU20L**



- DIP switches parameter setting version
- SU20L Basic smart unit
- Frame sizes M2-M6
- Rated operating current up to 1600 A
- 3 and 4-pole versions
- Rated ultimate short circuit breaking capacity $I_{cu} = I_{cs}$ up to 150 kA,
- Rated voltage 415 / 690 V AC
- High tripping accuracy, reliable operation, less sensibility to ambient temperature

Moulded Case Circuit Breakers Ex9M with SU20L type of smart unit are intended for applications in power distribution mainly. Testing according to IEC / EN 60947-2 standards ensures the functionality and reliability for wide variety of applications including isolation.

The electronic controller with DIP switches allows a fast and easy commission of the device for the installation requirements. Electronic technology improves the stability of the device on applications with significative mechanical stress.

These breakers are offered with breaking capacities from 36 kA up to extreme 150 kA. Rated impulse withstand voltage U_{imp} up to 12 kV makes it possible to use them even in system with occurrences of transient over-voltage waves of high intensity, e.g. in heavy industry.

Utilization category A and B circuit breakers.

Type Key

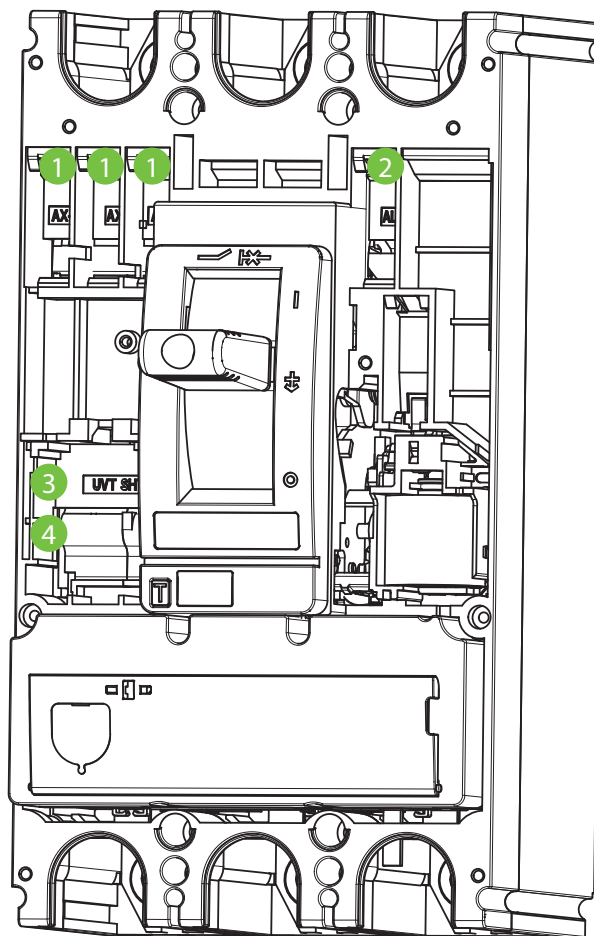
Ex9M	2	S	SU20L	250	3P	-	-
Product family	Frame size	Breaking capacity	Release technology	Rated current	Poles	Mechanism	MOD voltage
Ex9M	2: to 250 A 3: to 400 A / 630 A 4: to 630 A 5: to 800 A 6: to 1600 A	S: 36 kA N: 50 kA Q: 70 kA H: 100 kA P: 150 kA	SU20L: basic type electronic power distribution unit	M2: 250 A M3: 630 A M4: 630 A M5: 800 A M6: 1600 A	3P: 3-pole 4P4T: 4-pole with protected N-pole	- : Manual type MOD: Motor operated (M6)	- : Manual type AC 230 V AC 400 V DC 24 V DC 110 V DC 220 V

Certification marks



Moulded Case Circuit Breakers **Ex9M SU20L**

Internal accessories



1

Auxiliary contact
AX21/M

2

Signal contact
AL21/M

3

Shunt trip release
SHT2i
1 unit or UVT2i

4

Undervoltage release
UVT2i
1 unit or SHT2i

Auxiliary contact AX21/M

Signal contact AL21/M

Shunt trip releases SHT2i

Undervoltage releases UVT2i

All internal accessories for the frame sizes M2+M3 and M4+M5 are identical.

Moulded Case Circuit Breakers **Ex9M SU20L**

External accessories Ex9M2-M5 SU20L



Phase barriers
PHS2i



Terminal cover, short
TCV2i



Terminal cover, long
TCE2i



Remote operator
MOD2i



Direct rotary handle
RHD2i



Extended rotary handle
ERH2i

Phase barriers PHS2i

Terminal cover, short TCV2i

Terminal cover, long TCE2i

Remote operators MOD2i

Direct rotary handles RHD2i

Extended rotary handles ERH2i

Moulded Case Circuit Breakers **Ex9M SU20L**

External accessories Ex9M2-M5 SU20L



Tunnel terminals
MC2i W



Mounting depth spacers
WG i



Box terminals
MC2i



Screw terminals
MCS2i



Din rail adapter
DRA2i

Tunnel terminals MC2i W

Mounting depth spacers WG i

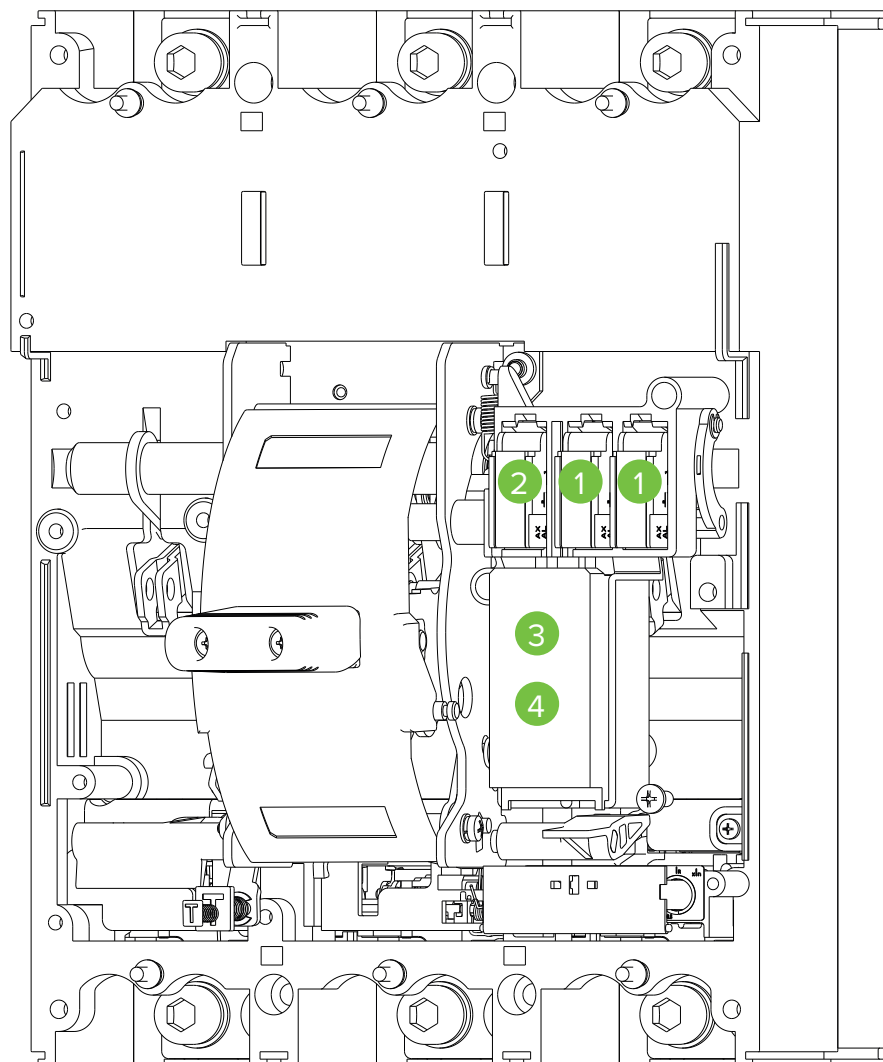
Box terminals MC2i

Screw terminals MCS2i

Din rail DRA2i

Moulded Case Circuit Breakers **Ex9M SU20L**

Internal accessories Ex9M6 SU20L



1

Auxiliary contact
AX21M

2

Signal contact
AL21M

3

Shunt trip release
SHT26
1 unit or UVT2i

4

Undervoltage release
UVT26
1 unit or SHT2i

Auxiliary contact AX21M

Signal contact AL21M

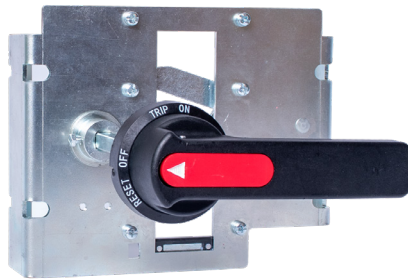
Shunt trip releases SHT26

Undervoltage releases UVT26

Only M6 MOD allows UVT+SHT+XF

Moulded Case Circuit Breakers **Ex9M SU20L**

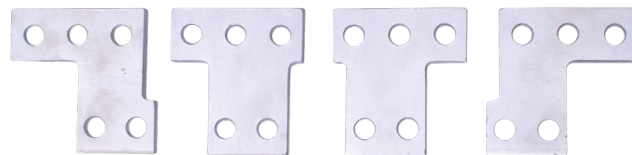
External accessories **Ex9M6 SU20L**



Extended rotatory
handle
ERH26



Extended handle
LHD26



Front connection
plate
JP26

Extended rotatory handles ERH26

Extended handles LHD26

Front connection plate JP26

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M2S up to 250 A, $I_{cu} = 36 \text{ kA}$

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 36 \text{ kA}$ at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, box terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	32 A	13–32 A	64–384 A	111177	Ex9M2S SU20L 32 3P	1/8
3	63 A	25–63 A	126–756 A	111178	Ex9M2S SU20L 63 3P	1/8
3	100 A	40–100 A	200–1200 A	111179	Ex9M2S SU20L 100 3P	1/8
3	160 A	64–160 A	320–1920 A	111180	Ex9M2S SU20L 160 3P	1/8
3	250 A	100–250 A	500–3000 A	111181	Ex9M2S SU20L 250 3P	1/8
4	32 A	13–32 A	64–384 A	111182	Ex9M2S SU20L 32 4P4T	1/8
4	63 A	25–63 A	126–756 A	111183	Ex9M2S SU20L 63 4P4T	1/8
4	100 A	40–100 A	200–1200 A	111184	Ex9M2S SU20L 100 4P4T	1/8
4	160 A	64–160 A	320–1920 A	111185	Ex9M2S SU20L 160 4P4T	1/8
4	250 A	100–250 A	500–3000 A	111186	Ex9M2S SU20L 250 4P4T	1/8

Version Ex9M2N up to 250 A, $I_{cu} = 50 \text{ kA}$

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50 \text{ kA}$ at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, box terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	32 A	13–32 A	64–384 A	111187	Ex9M2N SU20L 32 3P	1/8
3	63 A	25–63 A	126–756 A	111188	Ex9M2N SU20L 63 3P	1/8
3	100 A	40–100 A	200–1200 A	111189	Ex9M2N SU20L 100 3P	1/8
3	160 A	64–160 A	320–1920 A	111190	Ex9M2N SU20L 160 3P	1/8
3	250 A	100–250 A	500–3000 A	111191	Ex9M2N SU20L 250 3P	1/8
4	32 A	13–32 A	64–384 A	111192	Ex9M2N SU20L 32 4P4T	1/8
4	63 A	25–63 A	126–756 A	111193	Ex9M2N SU20L 63 4P4T	1/8
4	100 A	40–100 A	200–1200 A	111194	Ex9M2N SU20L 100 4P4T	1/8
4	160 A	64–160 A	320–1920 A	111195	Ex9M2N SU20L 160 4P4T	1/8
4	250 A	100–250 A	500–3000 A	111196	Ex9M2N SU20L 250 4P4T	1/8

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M2Q up to 250 A, $I_{cu} = 70$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, box terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	32 A	13–32 A	64–384 A	111197	Ex9M2Q SU20L 32 3P	1/8
3	63 A	25–63 A	126–756 A	111198	Ex9M2Q SU20L 63 3P	1/8
3	100 A	40–100 A	200–1200 A	111199	Ex9M2Q SU20L 100 3P	1/8
3	160 A	64–160 A	320–1920 A	111200	Ex9M2Q SU20L 160 3P	1/8
3	250 A	100–250 A	500–3000 A	111201	Ex9M2Q SU20L 250 3P	1/8
4	32 A	13–32 A	64–384 A	111202	Ex9M2Q SU20L 32 4P4T	1/8
4	63 A	25–63 A	126–756 A	111203	Ex9M2Q SU20L 63 4P4T	1/8
4	100 A	40–100 A	200–1200 A	111204	Ex9M2Q SU20L 100 4P4T	1/8
4	160 A	64–160 A	320–1920 A	111205	Ex9M2Q SU20L 160 4P4T	1/8
4	250 A	100–250 A	500–3000 A	111206	Ex9M2Q SU20L 250 4P4T	1/8

Version Ex9M2H up to 250 A, $I_{cu} = 100$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, box terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	32 A	13–32 A	64–384 A	111207	Ex9M2H SU20L 32 3P	1/8
3	63 A	25–63 A	126–756 A	111208	Ex9M2H SU20L 63 3P	1/8
3	100 A	40–100 A	200–1200 A	111209	Ex9M2H SU20L 100 3P	1/8
3	160 A	64–160 A	320–1920 A	111210	Ex9M2H SU20L 160 3P	1/8
3	250 A	100–250 A	500–3000 A	111211	Ex9M2H SU20L 250 3P	1/8
4	32 A	13–32 A	64–384 A	111212	Ex9M2H SU20L 32 4P4T	1/8
4	63 A	25–63 A	126–756 A	111213	Ex9M2H SU20L 63 4P4T	1/8
4	100 A	40–100 A	200–1200 A	111214	Ex9M2H SU20L 100 4P4T	1/8
4	160 A	64–160 A	320–1920 A	111215	Ex9M2H SU20L 160 4P4T	1/8
4	250 A	100–250 A	500–3000 A	111216	Ex9M2H SU20L 250 4P4T	1/8

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M2P up to 250 A, $I_{cu} = 150$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 150$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, box terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	32 A	13–32 A	64–384 A	111217	Ex9M2P SU20L 32 3P	1/8
3	63 A	25–63 A	126–756 A	111218	Ex9M2P SU20L 63 3P	1/8
3	100 A	40–100 A	200–1200 A	111219	Ex9M2P SU20L 100 3P	1/8
3	160 A	64–160 A	320–1920 A	111220	Ex9M2P SU20L 160 3P	1/8
3	250 A	100–250 A	500–3000 A	111221	Ex9M2P SU20L 250 3P	1/8
4	32 A	13–32 A	64–384 A	111222	Ex9M2P SU20L 32 4P4T	1/8
4	63 A	25–63 A	126–756 A	111223	Ex9M2P SU20L 63 4P4T	1/8
4	100 A	40–100 A	200–1200 A	111224	Ex9M2P SU20L 100 4P4T	1/8
4	160 A	64–160 A	320–1920 A	111225	Ex9M2P SU20L 160 4P4T	1/8
4	250 A	100–250 A	500–3000 A	111226	Ex9M2P SU20L 250 4P4T	1/8

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M3S up to 630 A, $I_{cu} = 36$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 36$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	250 A	100—250 A	500—3000 A	111227	Ex9M3S SU20L 250 3P	1/2
3	400 A	160—400 A	800—4800 A	111228	Ex9M3S SU20L 400 3P	1/2
3	630 A	252—630 A	1260—7560 A	111229	Ex9M3S SU20L 630 3P	1/2
4	250 A	100—250 A	500—3000 A	111230	Ex9M3S SU20L 250 4P4T	1/2
4	400 A	160—400 A	800—4800 A	111231	Ex9M3S SU20L 400 4P4T	1/2
4	630 A	252—630 A	1260—7560 A	111232	Ex9M3S SU20L 630 4P4T	1/2

Version Ex9M3N up to 630 A, $I_{cu} = 50$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	250 A	100—250 A	500—3000 A	111233	Ex9M3N SU20L 250 3P	1/2
3	400 A	160—400 A	800—4800 A	111234	Ex9M3N SU20L 400 3P	1/2
3	630 A	252—630 A	1260—7560 A	111235	Ex9M3N SU20L 630 3P	1/2
4	250 A	100—250 A	500—3000 A	111236	Ex9M3N SU20L 250 4P4T	1/2
4	400 A	160—400 A	800—4800 A	111237	Ex9M3N SU20L 400 4P4T	1/2
4	630 A	252—630 A	1260—7560 A	111238	Ex9M3N SU20L 630 4P4T	1/2

Version Ex9M3Q up to 630 A, $I_{cu} = 70$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	250 A	100—250 A	500—3000 A	111239	Ex9M3Q SU20L 250 3P	1/2
3	400 A	160—400 A	800—4800 A	111240	Ex9M3Q SU20L 400 3P	1/2
3	630 A	252—630 A	1260—7560 A	111241	Ex9M3Q SU20L 630 3P	1/2
4	250 A	100—250 A	500—3000 A	111242	Ex9M3Q SU20L 250 4P4T	1/2
4	400 A	160—400 A	800—4800 A	111243	Ex9M3Q SU20L 400 4P4T	1/2
4	630 A	252—630 A	1260—7560 A	111244	Ex9M3Q SU20L 630 4P4T	1/2

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M3H up to 630 A, $I_{cu} = 100$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	250 A	100—250 A	500—3000 A	111245	Ex9M3H SU20L 250 3P	1/2
3	400 A	160—400 A	800—4800 A	111246	Ex9M3H SU20L 400 3P	1/2
3	630 A	252—630 A	1260—7560 A	111247	Ex9M3H SU20L 630 3P	1/2
4	250 A	100—250 A	500—3000 A	111248	Ex9M3H SU20L 250 4P4T	1/2
4	400 A	160—400 A	800—4800 A	111249	Ex9M3H SU20L 400 4P4T	1/2
4	630 A	252—630 A	1260—7560 A	111250	Ex9M3H SU20L 630 4P4T	1/2

Version Ex9M3P up to 630 A, $I_{cu} = 150$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 150$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	250 A	100—250 A	500—3000 A	111251	Ex9M3P SU20L 250 3P	1/2
3	400 A	160—400 A	800—4800 A	111252	Ex9M3P SU20L 400 3P	1/2
3	630 A	252—630A	1260—7560 A	111253	Ex9M3P SU20L 630 3P	1/2
4	250 A	100—250 A	500—3000 A	111254	Ex9M3P SU20L 250 4P4T	1/2
4	400 A	160—400 A	800—4800 A	111255	Ex9M3P SU20L 400 4P4T	1/2
4	630 A	252—630 A	1260—7560 A	111256	Ex9M3P SU20L 630 4P4T	1/2

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M4S 630 A, $I_{cu} = 36$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 36$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	630 A	252—630 A	1260—7560 A	111257	Ex9M4S SU20L 630 3P	1/1
4	630 A	252—630 A	1260—7560 A	111258	Ex9M4S SU20L 630 4P4T	1/1

Version Ex9M4N 630 A, $I_{cu} = 50$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	630 A	252—630 A	1260—7560 A	111259	Ex9M4N SU20L 630 3P	1/1
4	630 A	252—630 A	1260—7560 A	111260	Ex9M4N SU20L 630 4P4T	1/1

Version Ex9M4Q 630 A, $I_{cu} = 70$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	630 A	252—630 A	1260—7560 A	111261	Ex9M4Q SU20L 630 3P	1/1
4	630 A	252—630 A	1260—7560 A	111262	Ex9M4Q SU20L 630 4P4T	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M4H 630 A, $I_{cu} = 100$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	630 A	252—630 A	1260—7560 A	111263	Ex9M4H SU20L 630 3P	1/1
4	630 A	252—630 A	1260—7560 A	111264	Ex9M4H SU20L 630 4P4T	1/1

Version Ex9M4P 630 A, $I_{cu} = 150$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 150$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	630 A	252—630 A	1260—7560 A	111265	Ex9M4P SU20L 630 3P	1/1
4	630 A	252—630 A	1260—7560 A	111266	Ex9M4P SU20L 630 4P4T	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M5S 800 A, $I_{cu} = 36$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 36$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	111267	Ex9M5S SU20L 800 3P	1/1
4	800 A	320—800 A	1600—9600 A	111268	Ex9M5S SU20L 800 4P4T	1/1

Version Ex9M5N 800 A, $I_{cu} = 50$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	111269	Ex9M5N SU20L 800 3P	1/1
4	800 A	320—800 A	1600—9600 A	111270	Ex9M5N SU20L 800 4P4T	1/1

Version Ex9M5Q 800 A, $I_{cu} = 70$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	111271	Ex9M5Q SU20L 800 3P	1/1
4	800 A	320—800 A	1600—9600 A	111272	Ex9M5Q SU20L 800 4P4T	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M5H 800 A, $I_{cu} = 100$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	111273	Ex9M5H SU20L 800 3P	1/1
4	800 A	320—800 A	1600—9600 A	111274	Ex9M5H SU20L 800 4P4T	1/1

Version Ex9M5P 800 A, $I_{cu} = 150$ kA

- 3 and 4-pole Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 150$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	111275	Ex9M5P SU20L 800 3P	1/1
4	800 A	320—800 A	1600—9600 A	111276	Ex9M5P SU20L 800 4P4T	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6N up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110340	Ex9M6N SU20L 800 3P	1/1
3	1000 A	400—1000 A	2000—12000 A	110341	Ex9M6N SU20L 1000 3P	1/1
3	1250 A	500—1250 A	2500—15000 A	110342	Ex9M6N SU20L 1250 3P	1/1
3	1600 A	640—1600 A	3200—19200 A	110343	Ex9M6N SU20L 1600 3P	1/1
4	800 A	320—800 A	1600—9600 A	110344	Ex9M6N SU20L 800 4P	1/1
4	1000 A	400—1000 A	2000—12000 A	110345	Ex9M6N SU20L 1000 4P	1/1
4	1250 A	500—1250 A	2500—15000 A	110346	Ex9M6N SU20L 1250 4P	1/1
4	1600 A	640—1600 A	3200—19200 A	110347	Ex9M6N SU20L 1600 4P	1/1

Version Ex9M6Q up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110348	Ex9M6Q SU20L 800 3P	1/1
3	1000 A	400—1000 A	2000—12000 A	110349	Ex9M6Q SU20L 1000 3P	1/1
3	1250 A	500—1250 A	2500—15000 A	110350	Ex9M6Q SU20L 1250 3P	1/1
3	1600 A	640—1600 A	3200—19200 A	110351	Ex9M6Q SU20L 1600 3P	1/1
4	800 A	320—800 A	1600—9600 A	110352	Ex9M6Q SU20L 800 4P	1/1
4	1000 A	400—1000 A	2000—12000 A	110353	Ex9M6Q SU20L 1000 4P	1/1
4	1250 A	500—1250 A	2500—15000 A	110354	Ex9M6Q SU20L 1250 4P	1/1
4	1600 A	640—1600 A	3200—19200 A	110355	Ex9M6Q SU20L 1600 4P	1/1

Version Ex9M6H up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA, $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110356	Ex9M6H SU20L 800 3P	1/1
3	1000 A	400—1000 A	2000—12000 A	110357	Ex9M6H SU20L 1000 3P	1/1
3	1250 A	500—1250 A	2500—15000 A	110358	Ex9M6H SU20L 1250 3P	1/1
3	1600 A	640—1600 A	3200—19200 A	110359	Ex9M6H SU20L 1600 3P	1/1
4	800 A	320—800 A	1600—9600 A	110360	Ex9M6H SU20L 800 4P	1/1
4	1000 A	400—1000 A	2000—12000 A	110361	Ex9M6H SU20L 1000 4P	1/1
4	1250 A	500—1250 A	2500—15000 A	110362	Ex9M6H SU20L 1250 4P	1/1
4	1600 A	640—1600 A	3200—19200 A	110363	Ex9M6H SU20L 1600 4P	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6N MOD AC230V up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110364	Ex9M6N SU20L 800 3P MOD AC230	1/1
3	1000 A	400—1000 A	2000—12000 A	110365	Ex9M6N SU20L 1000 3P MOD AC230	1/1
3	1250 A	500—1250 A	2500—15000 A	110366	Ex9M6N SU20L 1250 3P MOD AC230	1/1
3	1600 A	640—1600 A	3200—19200 A	110367	Ex9M6N SU20L 1600 3P MOD AC230	1/1
4	800 A	320—800 A	1600—9600 A	110368	Ex9M6N SU20L 800 4P MOD AC230	1/1
4	1000 A	400—1000 A	2000—12000 A	110369	Ex9M6N SU20L 1000 4P MOD AC230	1/1
4	1250 A	500—1250 A	2500—15000 A	110370	Ex9M6N SU20L 1250 4P MOD AC230	1/1
4	1600 A	640—1600 A	3200—19200 A	110371	Ex9M6N SU20L 1600 4P MOD AC230	1/1

Version Ex9M6N MOD AC400V up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110372	Ex9M6N SU20L 800 3P MOD AC400	1/1
3	1000 A	400—1000 A	2000—12000 A	110373	Ex9M6N SU20L 1000 3P MOD AC400	1/1
3	1250 A	500—1250 A	2500—15000 A	110374	Ex9M6N SU20L 1250 3P MOD AC400	1/1
3	1600 A	640—1600 A	3200—19200 A	110375	Ex9M6N SU20L 1600 3P MOD AC400	1/1
4	800 A	320—800 A	1600—9600 A	110376	Ex9M6N SU20L 800 4P MOD AC400	1/1
4	1000 A	400—1000 A	2000—12000 A	110377	Ex9M6N SU20L 1000 4P MOD AC400	1/1
4	1250 A	500—1250 A	2500—15000 A	110378	Ex9M6N SU20L 1250 4P MOD AC400	1/1
4	1600 A	640—1600 A	3200—19200 A	110379	Ex9M6N SU20L 1600 4P MOD AC400	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6N MOD DC24V up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in steps $(0.4-0.5-0.6-0.7-0.8-0.9-0.95-1.0) \times I_n$
- I_i can be set in steps $(2-3-4-6-8-10-12) \times I_n$
- Mounting screws and phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	117318	Ex9M6N SU20L 800 3P MOD DC24V	1/1
3	1000 A	400—1000 A	2000—12000 A	117319	Ex9M6N SU20L 1000 3P MOD DC24V	1/1
3	1250 A	500—1250 A	2500—15000 A	117320	Ex9M6N SU20L 1250 3P MOD DC24V	1/1
3	1600 A	640—1600 A	3200—19200 A	117321	Ex9M6N SU20L 1600 3P MOD DC24V	1/1
4	800 A	320—800 A	1600—9600 A	117322	Ex9M6N SU20L 800 4P MOD DC24V	1/1
4	1000 A	400—1000 A	2000—12000 A	117323	Ex9M6N SU20L 1000 4P MOD DC24V	1/1
4	1250 A	500—1250 A	2500—15000 A	117324	Ex9M6N SU20L 1250 4P MOD DC24V	1/1
4	1600 A	640—1600 A	3200—19200 A	117325	Ex9M6N SU20L 1600 4P MOD DC24V	1/1

Version Ex9M6N MOD DC110V up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110380	Ex9M6N SU20L 800 3P MOD DC110	1/1
3	1000 A	400—1000 A	2000—12000 A	110381	Ex9M6N SU20L 1000 3P MOD DC110	1/1
3	1250 A	500—1250 A	2500—15000 A	110382	Ex9M6N SU20L 1250 3P MOD DC110	1/1
3	1600 A	640—1600 A	3200—19200 A	110383	Ex9M6N SU20L 1600 3P MOD DC110	1/1
4	800 A	320—800 A	1600—9600 A	110384	Ex9M6N SU20L 800 4P MOD DC110	1/1
4	1000 A	400—1000 A	2000—12000 A	110385	Ex9M6N SU20L 1000 4P MOD DC110	1/1
4	1250 A	500—1250 A	2500—15000 A	110386	Ex9M6N SU20L 1250 4P MOD DC110	1/1
4	1600 A	640—1600 A	3200—19200 A	110387	Ex9M6N SU20L 1600 4P MOD DC110	1/1

Version Ex9M6N MOD DC220V up to 1600 A, $I_{cu} = 50$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 50$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110388	Ex9M6N SU20L 800 3P MOD DC220	1/1
3	1000 A	400—1000 A	2000—12000 A	110389	Ex9M6N SU20L 1000 3P MOD DC220	1/1
3	1250 A	500—1250 A	2500—15000 A	110390	Ex9M6N SU20L 1250 3P MOD DC220	1/1
3	1600 A	640—1600 A	3200—19200 A	110391	Ex9M6N SU20L 1600 3P MOD DC220	1/1
4	800 A	320—800 A	1600—9600 A	110392	Ex9M6N SU20L 800 4P MOD DC220	1/1
4	1000 A	400—1000 A	2000—12000 A	110393	Ex9M6N SU20L 1000 4P MOD DC220	1/1
4	1250 A	500—1250 A	2500—15000 A	110394	Ex9M6N SU20L 1250 4P MOD DC220	1/1
4	1600 A	640—1600 A	3200—19200 A	110395	Ex9M6N SU20L 1600 4P MOD DC220	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6Q MOD AC230V up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110396	Ex9M6Q SU20L 800 3P MOD AC230	1/1
3	1000 A	400—1000 A	2000—12000 A	110397	Ex9M6Q SU20L 1000 3P MOD AC230	1/1
3	1250 A	500—1250 A	2500—15000 A	110398	Ex9M6Q SU20L 1250 3P MOD AC230	1/1
3	1600 A	640—1600 A	3200—19200 A	110399	Ex9M6Q SU20L 1600 3P MOD AC230	1/1
4	800 A	320—800 A	1600—9600 A	110400	Ex9M6Q SU20L 800 4P MOD AC230	1/1
4	1000 A	400—1000 A	2000—12000 A	110401	Ex9M6Q SU20L 1000 4P MOD AC230	1/1
4	1250 A	500—1250 A	2500—15000 A	110402	Ex9M6Q SU20L 1250 4P MOD AC230	1/1
4	1600 A	640—1600 A	3200—19200 A	110403	Ex9M6Q SU20L 1600 4P MOD AC230	1/1

Version Ex9M6Q MOD AC400V up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110404	Ex9M6Q SU20L 800 3P MOD AC400	1/1
3	1000 A	400—1000 A	2000—12000 A	110405	Ex9M6Q SU20L 1000 3P MOD AC400	1/1
3	1250 A	500—1250 A	2500—15000 A	110406	Ex9M6Q SU20L 1250 3P MOD AC400	1/1
3	1600 A	640—1600 A	3200—19200 A	110407	Ex9M6Q SU20L 1600 3P MOD AC400	1/1
4	800 A	320—800 A	1600—9600 A	110408	Ex9M6Q SU20L 800 4P MOD AC400	1/1
4	1000 A	400—1000 A	2000—12000 A	110409	Ex9M6Q SU20L 1000 4P MOD AC400	1/1
4	1250 A	500—1250 A	2500—15000 A	110410	Ex9M6Q SU20L 1250 4P MOD AC400	1/1
4	1600 A	640—1600 A	3200—19200 A	110411	Ex9M6Q SU20L 1600 4P MOD AC400	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6Q MOD DC24V up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in steps $(0.4-0.5-0.6-0.7-0.8-0.9-0.95-1.0) \times I_n$
- I_i can be set in steps $(2-3-4-6-8-10-12) \times I_n$
- Mounting screws and phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	117326	Ex9M6Q SU20L 800 3P MOD DC24V	1/1
3	1000 A	400—1000 A	2000—12000 A	117327	Ex9M6Q SU20L 1000 3P MOD DC24V	1/1
3	1250 A	500—1250 A	2500—15000 A	117328	Ex9M6Q SU20L 1250 3P MOD DC24V	1/1
3	1600 A	640—1600 A	3200—19200 A	117329	Ex9M6Q SU20L 1600 3P MOD DC24V	1/1
4	800 A	320—800 A	1600—9600 A	117330	Ex9M6Q SU20L 800 4P MOD DC24V	1/1
4	1000 A	400—1000 A	2000—12000 A	117331	Ex9M6Q SU20L 1000 4P MOD DC24V	1/1
4	1250 A	500—1250 A	2500—15000 A	117332	Ex9M6Q SU20L 1250 4P MOD DC24V	1/1
4	1600 A	640—1600 A	3200—19200 A	117333	Ex9M6Q SU20L 1600 4P MOD DC24V	1/1

Version Ex9M6Q MOD DC110V up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110412	Ex9M6Q SU20L 800 3P MOD DC110	1/1
3	1000 A	400—1000 A	2000—12000 A	110413	Ex9M6Q SU20L 1000 3P MOD DC110	1/1
3	1250 A	500—1250 A	2500—15000 A	110414	Ex9M6Q SU20L 1250 3P MOD DC110	1/1
3	1600 A	640—1600 A	3200—19200 A	110415	Ex9M6Q SU20L 1600 3P MOD DC110	1/1
4	800 A	320—800 A	1600—9600 A	110416	Ex9M6Q SU20L 800 4P MOD DC110	1/1
4	1000 A	400—1000 A	2000—12000 A	110417	Ex9M6Q SU20L 1000 4P MOD DC110	1/1
4	1250 A	500—1250 A	2500—15000 A	110418	Ex9M6Q SU20L 1250 4P MOD DC110	1/1
4	1600 A	640—1600 A	3200—19200 A	110419	Ex9M6Q SU20L 1600 4P MOD DC110	1/1

Version Ex9M6Q MOD DC220V up to 1600 A, $I_{cu} = 70$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = I_{cu} = 70$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110420	Ex9M6Q SU20L 800 3P MOD DC220	1/1
3	1000 A	400—1000 A	2000—12000 A	110421	Ex9M6Q SU20L 1000 3P MOD DC220	1/1
3	1250 A	500—1250 A	2500—15000 A	110422	Ex9M6Q SU20L 1250 3P MOD DC220	1/1
3	1600 A	640—1600 A	3200—19200 A	110423	Ex9M6Q SU20L 1600 3P MOD DC220	1/1
4	800 A	320—800 A	1600—9600 A	110424	Ex9M6Q SU20L 800 4P MOD DC220	1/1
4	1000 A	400—1000 A	2000—12000 A	110425	Ex9M6Q SU20L 1000 4P MOD DC220	1/1
4	1250 A	500—1250 A	2500—15000 A	110426	Ex9M6Q SU20L 1250 4P MOD DC220	1/1
4	1600 A	640—1600 A	3200—19200 A	110427	Ex9M6Q SU20L 1600 4P MOD DC220	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6H MOD AC230V up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110428	Ex9M6H SU20L 800 3P MOD AC230	1/1
3	1000 A	400—1000 A	2000—12000 A	110429	Ex9M6H SU20L 1000 3P MOD AC230	1/1
3	1250 A	500—1250 A	2500—15000 A	110430	Ex9M6H SU20L 1250 3P MOD AC230	1/1
3	1600 A	640—1600 A	3200—19200 A	110431	Ex9M6H SU20L 1600 3P MOD AC230	1/1
4	800 A	320—800 A	1600—9600 A	110432	Ex9M6H SU20L 800 4P MOD AC230	1/1
4	1000 A	400—1000 A	2000—12000 A	110433	Ex9M6H SU20L 1000 4P MOD AC230	1/1
4	1250 A	500—1250 A	2500—15000 A	110434	Ex9M6H SU20L 1250 4P MOD AC230	1/1
4	1600 A	640—1600 A	3200—19200 A	110435	Ex9M6H SU20L 1600 4P MOD AC230	1/1

Version Ex9M6H MOD AC400V up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110436	Ex9M6H SU20L 800 3P MOD AC400	1/1
3	1000 A	400—1000 A	2000—12000 A	110437	Ex9M6H SU20L 1000 3P MOD AC400	1/1
3	1250 A	500—1250 A	2500—15000 A	110438	Ex9M6H SU20L 1250 3P MOD AC400	1/1
3	1600 A	640—1600 A	3200—19200 A	110439	Ex9M6H SU20L 1600 3P MOD AC400	1/1
4	800 A	320—800 A	1600—9600 A	110440	Ex9M6H SU20L 800 4P MOD AC400	1/1
4	1000 A	400—1000 A	2000—12000 A	110441	Ex9M6H SU20L 1000 4P MOD AC400	1/1
4	1250 A	500—1250 A	2500—15000 A	110442	Ex9M6H SU20L 1250 4P MOD AC400	1/1
4	1600 A	640—1600 A	3200—19200 A	110443	Ex9M6H SU20L 1600 4P MOD AC400	1/1

Moulded Case Circuit Breakers **Ex9M SU20L**

Version Ex9M6H MOD DC24V up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in steps $(0.4-0.5-0.6-0.7-0.8-0.9-0.95-1.0) \times I_n$
- I_i can be set in steps $(2-3-4-6-8-10-12) \times I_n$
- Mounting screws and phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	117334	Ex9M6H SU20L 800 3P MOD DC24V	1/1
3	1000 A	400—1000 A	2000—12000 A	117335	Ex9M6H SU20L 1000 3P MOD DC24V	1/1
3	1250 A	500—1250 A	2500—15000 A	117336	Ex9M6H SU20L 1250 3P MOD DC24V	1/1
3	1600 A	640—1600 A	3200—19200 A	117337	Ex9M6H SU20L 1600 3P MOD DC24V	1/1
4	800 A	320—800 A	1600—9600 A	117338	Ex9M6H SU20L 800 4P MOD DC24V	1/1
4	1000 A	400—1000 A	2000—12000 A	117339	Ex9M6H SU20L 1000 4P MOD DC24V	1/1
4	1250 A	500—1250 A	2500—15000 A	117340	Ex9M6H SU20L 1250 4P MOD DC24V	1/1
4	1600 A	640—1600 A	3200—19200 A	117341	Ex9M6H SU20L 1600 4P MOD DC24V	1/1

Version Ex9M6H MOD DC110V up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110444	Ex9M6H SU20L 800 3P MOD DC110	1/1
3	1000 A	400—1000 A	2000—12000 A	110445	Ex9M6H SU20L 1000 3P MOD DC110	1/1
3	1250 A	500—1250 A	2500—15000 A	110446	Ex9M6H SU20L 1250 3P MOD DC110	1/1
3	1600 A	640—1600 A	3200—19200 A	110447	Ex9M6H SU20L 1600 3P MOD DC110	1/1
4	800 A	320—800 A	1600—9600 A	110448	Ex9M6H SU20L 800 4P MOD DC110	1/1
4	1000 A	400—1000 A	2000—12000 A	110449	Ex9M6H SU20L 1000 4P MOD DC110	1/1
4	1250 A	500—1250 A	2500—15000 A	110450	Ex9M6H SU20L 1250 4P MOD DC110	1/1
4	1600 A	640—1600 A	3200—19200 A	110451	Ex9M6H SU20L 1600 4P MOD DC110	1/1

Version Ex9M6H MOD DC220V up to 1600 A, $I_{cu} = 100$ kA

- 3 and 4-pole Electronic Moulded Case Circuit Breakers
- $I_{cs} = 70$ kA $I_{cu} = 100$ kA at 415 V AC
- I_r can be set in range $(0.4 - 1.0) \times I_n$
- I_i can be set in range $(2 - 12) \times I_n$
- Mounting screws, screw type terminals as well as phase barriers in the scope of delivery
- 2x AX, 1x AL, 1x SHT26, 1x XF26 with same operative voltage are pre-mounted (customizable under request)



Poles	Rated current I_n	Overcurrent release I_r	Instant. release I_i	Article No.	Type	Packing
3	800 A	320—800 A	1600—9600 A	110452	Ex9M6H SU20L 800 3P MOD DC220	1/1
3	1000 A	400—1000 A	2000—12000 A	110453	Ex9M6H SU20L 1000 3P MOD DC220/1	1/1
3	1250 A	500—1250 A	2500—15000 A	110454	Ex9M6H SU20L 1250 3P MOD DC220/1	1/1
3	1600 A	640—1600 A	3200—19200 A	110455	Ex9M6H SU20L 1600 3P MOD DC220/1	1/1
4	800 A	320—800 A	1600—9600 A	110456	Ex9M6H SU20L 800 4P MOD DC220	1/1
4	1000 A	400—1000 A	2000—12000 A	110457	Ex9M6H SU20L 1000 4P MOD DC220/1	1/1
4	1250 A	500—1250 A	2500—15000 A	110458	Ex9M6H SU20L 1250 4P MOD DC220/1	1/1
4	1600 A	640—1600 A	3200—19200 A	110459	Ex9M6H SU20L 1600 4P MOD DC220/1	1/1

Technical Data **Ex9M2 SU20L**

SU20L Moulded Case Circuit Breakers up to 250 A

General parameters		
Suitable for commercial as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT22	101416 — 101424
Undervoltage releases	UVT22	101425 — 101426
Max. number of installed internal accessories is 2 pcs of AX21M, 1 pc of AL21M and 1 pc of a release (SHT22 or UVT22)		
External accessories		
Direct rotary handle	RHD22	101429
Extended rotary handle	ERH22	101428
Remote motor operators	MOD22	101430 — 101434
Terminal cover, short	TCV22 3P, 4P	101442, 102374
Terminal cover, long	TCE22 3P, 4P	101443, 102375
Phase barrier	PHS22	112111
Connection terminals	MC22	103709, 103869, 103711, 103713
DIN-rail adapter	DRA22	106320
Plug-in base	PIA 22 SU20	112093 — 112094
Mounting screws, box terminals as well as phase barriers in the scope of delivery		

Derating coefficient of Tripping Characteristics on accessories combination					
Combined accessory	$I_n (T) [A]$				
	32 A	63 A	100 A	160 A	250 A
Ex9ML	1	1	1	1	0.95
PIA 22 SU20	1	1	1	1	0.95

Technical Data **Ex9M2 SU20L**

SU20L Moulded Case Circuit Breakers up to 250 A

Electrical parameters					
	Ex9M2S	Ex9M2N	Ex9M2Q	Ex9M2H	Ex9M2P
Tested according to	IEC/EN 60947-2				
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC				
Rated insulation voltage U_i	1 000 V				
Rated impulse withstand voltage U_{imp}	8 kV				
Rated frequency	50/60 Hz				
Rated ultimate short-circuit breaking capacity I_{cu}	36 kA / 415 V 6 kA / 690 V	50 kA / 415 V 8 kA / 690 V	70 kA / 415 V 8 kA / 690 V	100 kA / 415 V 10 kA / 690 V	150 kA / 415 V 10 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	36 kA / 415 V 6 kA / 690 V	50 kA / 415 V 8 kA / 690 V	70 kA / 415 V 8 kA / 690 V	100 kA / 415 V 10 kA / 690 V	150 kA / 415 V 10 kA / 690 V
Rated current	32 / 63 / 100 / 160 / 250 A				
Utilization category	A				
Rated short-time withstanding current I_{cw} 1s	1 kA (32 — 63 A) 2 kA (80 — 160 A) 3 kA (180 — 250 A)				
Mechanical service life	15 000 operation cycles				
Electrical service life	5 000 operation cycles / 415 V AC 2 000 operation cycles / 690 V AC				
Total disconnection time at short circuit	< 2 ms				
Line voltage connection	arbitrary above or below				

Dependence of Tripping Characteristics on Ambient Temperature					
T [°C]	I_n (T) [A]				
	32 A	63 A	100 A	160 A	250 A
-35	32	63	100	160	250
-25	32	63	100	160	250
-15	32	63	100	160	250
-5	32	63	100	160	250
0	32	63	100	160	250
10	32	63	100	160	250
20	32	63	100	160	250
30	32	63	100	160	250
40	32	63	100	160	250
50	32	63	100	160	240
60	32	63	100	160	225
70	32	63	100	160	213

Power dissipation characteristics					
I_n	32 A	63 A	100 A	160 A	250 A
Pole resistance	0.8 mΩ	0.4 mΩ	0.4 mΩ	0.4 mΩ	0.4 mΩ
Pole power dissipation	0.8 W	1.6 W	4.0 W	10.2 W	25 W

Technical Data **Ex9M2 SU20L**

SU20L Moulded Case Circuit Breakers up to 250 A

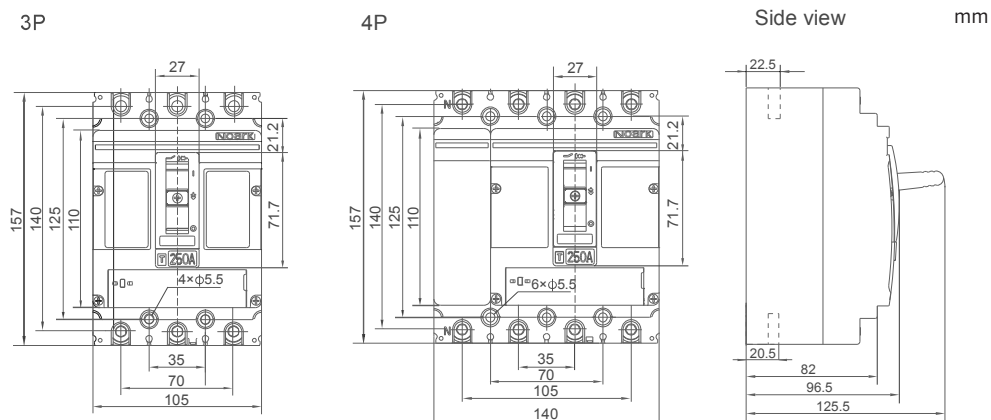
Mechanical parameters

Device width 3P / 4P	105 mm / 140 mm
Device height	157 mm
Device depth	96.5 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	box
Terminal capacity	10 — 120 mm ²
Fastening torque of terminals	25 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	2 kg / 2.65 kg
Mounting position	vertical, can be rotated by 90° in each axis

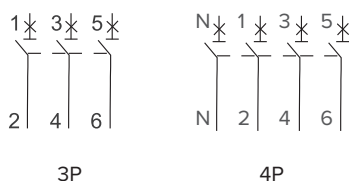
Derating coefficient of technical parameters based on altitude

Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=8$ kV)	2200 V AC	2050 V AC	1900 V AC	1770 V AC

Dimensions

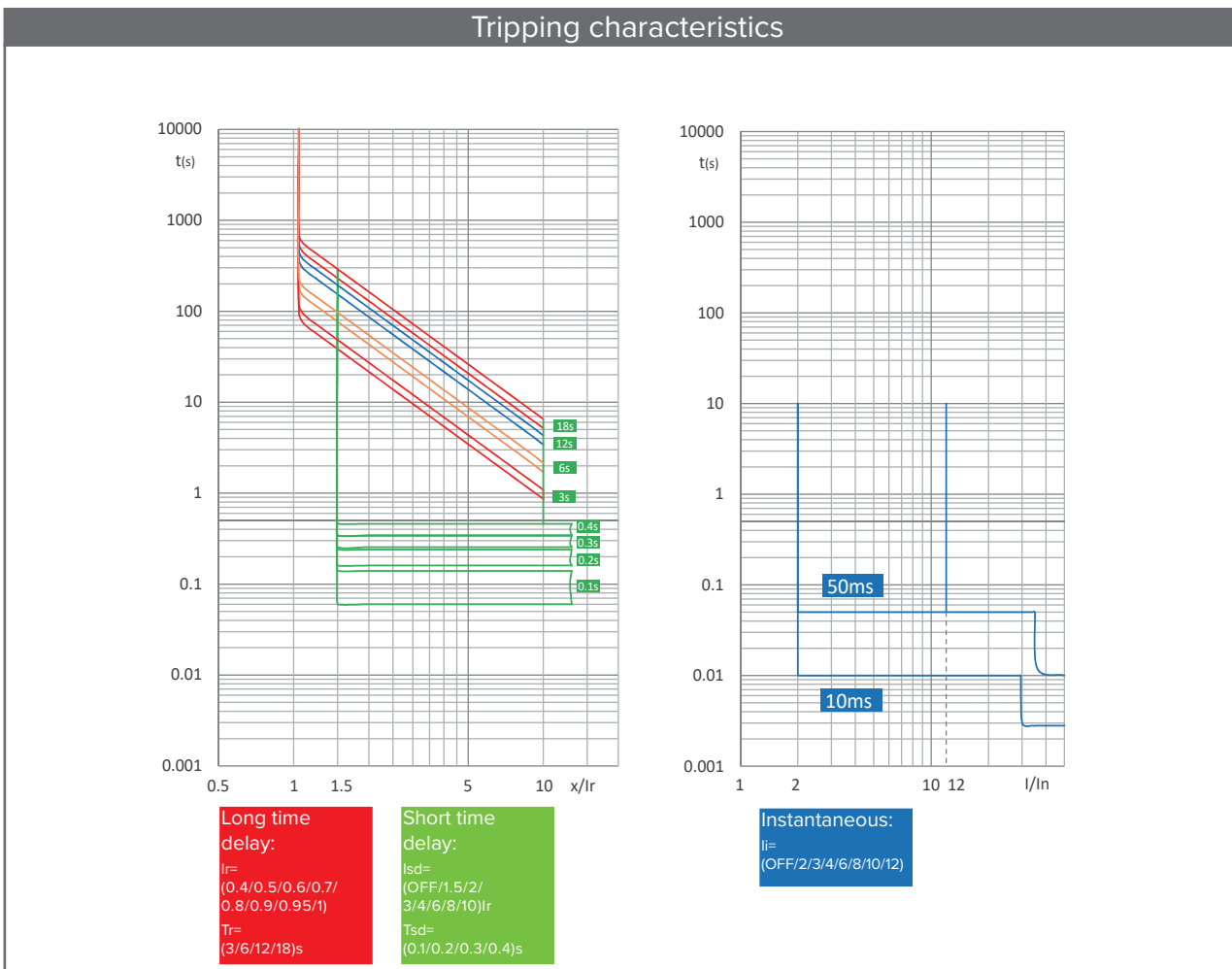
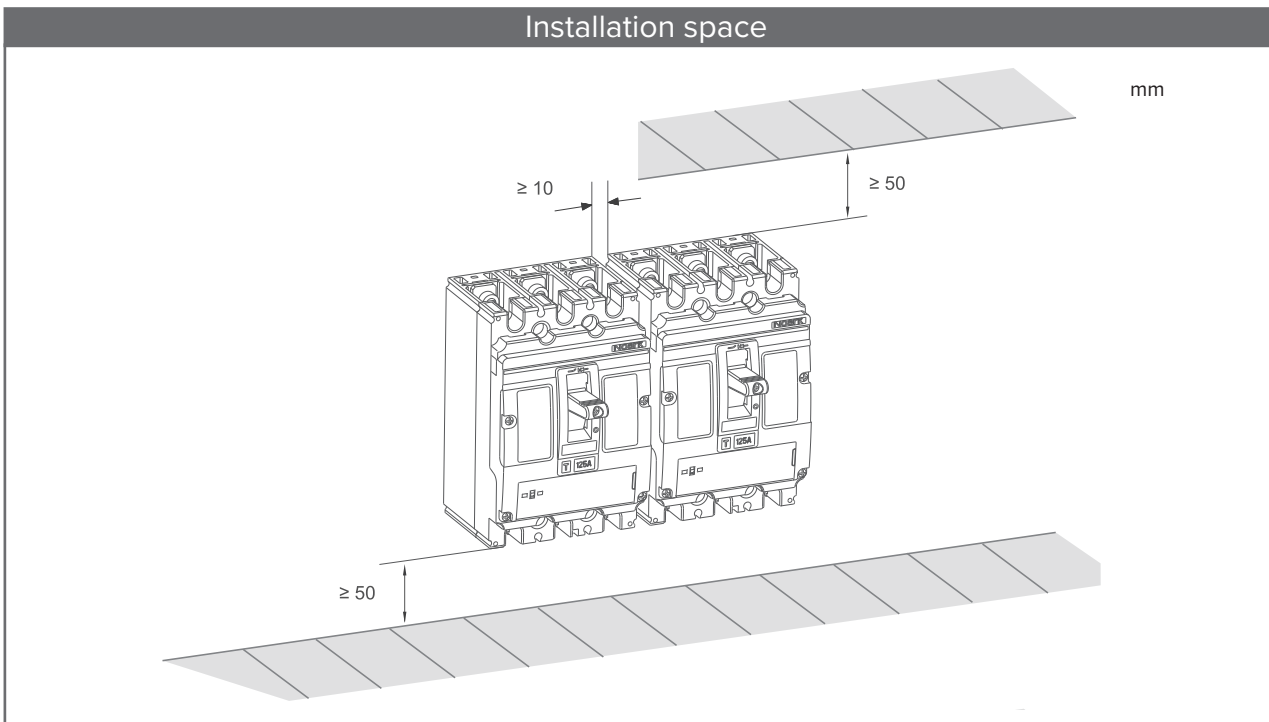


Wiring diagram



Technical Data **Ex9M2 SU20L**

SU20L Moulded Case Circuit Breakers up to 250 A



Technical Data **Ex9M3 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

General parameters		
Suitable for commercial as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT22	101416 — 101424
Undervoltage releases	UVT22	101425 — 101426
Max. number of installed internal accessories is 2 pcs of AX21M, 1 pc of AL21M and 1 pc of a release (SHT22 or UVT22)		
External accessories		
Direct rotary handle	RHD23	101483
Extended rotary handle	ERH23	101482
Remote motor operators	MOD23	101484 — 101488
Terminal cover, short	TCV23 3P, 4P	101489, 102376
Terminal cover, long	TCE23 3P, 4P	101490, 102377
Phase barrier	PHS23	112112
Connection terminals	MC23	103715 — 103722
Plug-in base	PIA 23 SU20	112095 — 112100
Withdrawable base	DOB 23 SU20	112101 — 112108
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Derating coefficient of Tripping Characteristics on accessories combination			
Combined accessory	I_n (T) [A]		
	250 A	400 A	630 A
Ex9ML	1	1	0.9
PIA 23 SU20	1	1	0.9 ($\leq 570A$)
DOB 23 SU20	1	1	0.9 ($\leq 570A$)

Technical Data **Ex9M3 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

Electrical parameters					
	Ex9M3S	Ex9M3N	Ex9M3Q	Ex9M3H	Ex9M3P
Tested according to	IEC/EN 60947-2				
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC				
Rated insulation voltage U_i	1 000 V				
Rated impulse withstand voltage U_{imp}	12 kV				
Rated frequency	50/60 Hz				
Rated ultimate short-circuit breaking capacity I_{cu}	36 kA / 415 V 10 kA / 690 V	50 kA / 415 V 12 kA / 690 V	70 kA / 415 V 12 kA / 690 V	100 kA / 415 V 15 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	36 kA / 415 V 10 kA / 690 V	50 kA / 415 V 12 kA / 690 V	70 kA / 415 V 12 kA / 690 V	100 kA / 415 V 15 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated current	250 / 400 / 630 A				
Utilization category	B				
Rated short-time withstanding current I_{cw} 1s	5 kA (250 — 400 A) 8 kA (500 — 630 A)				
Mechanical service life	15 000 operation cycles				
Electrical service life	4 000 operation cycles / 415 V AC 1 500 operation cycles / 690 V AC				
Total disconnection time at short circuit	< 2 ms				
Line voltage connection	arbitrary above or below				

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I_n (T) [A]		
	250 A	400 A	630 A
-35	250	400	630
-25	250	400	630
-15	250	400	630
-5	250	400	630
0	250	400	630
10	250	400	630
20	250	400	630
30	250	400	630
40	250	400	630
50	250	380	600
60	250	360	570
70	250	340	540

Power dissipation characteristics

I_n	250 A	400 A	630 A
Pole resistance	0.15 mΩ	0.15 mΩ	0.12 mΩ
Pole power dissipation	9.4 W	24.0 W	47.6 W

Technical Data **Ex9M3 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

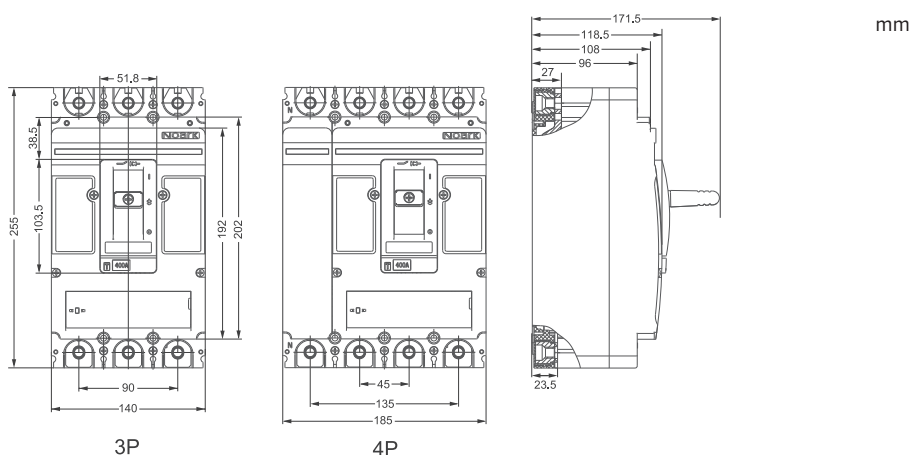
Mechanical parameters

Device width 3P / 4P	140 mm / 185 mm
Device height	255 mm
Device depth	118.5 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M10 screws
Busbar thickness	≤ 8 mm
Busbar width	≤ 30 mm
Cable lug width	≤ 30 mm
Fastening torque of terminals	25 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	5.8 kg / 7.8 kg
Mounting position	vertical, can be rotated by 90° in each axis

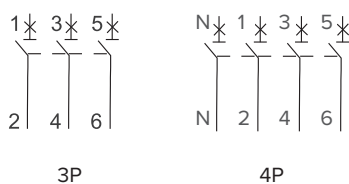
Derating coefficient of technical parameters based on altitude

Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	12 kV	10 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=12$ kV)	2550 V AC	2370 V AC	2200 V AC	2050 V AC

Dimensions



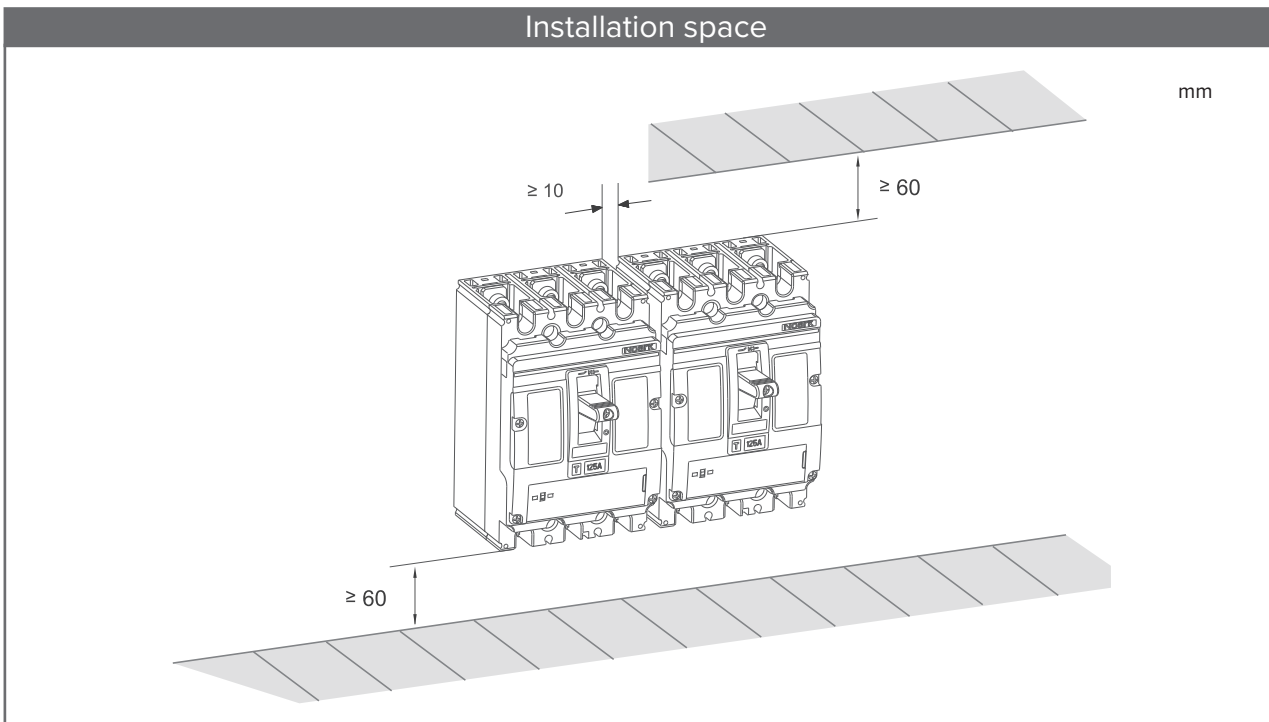
Wiring diagram



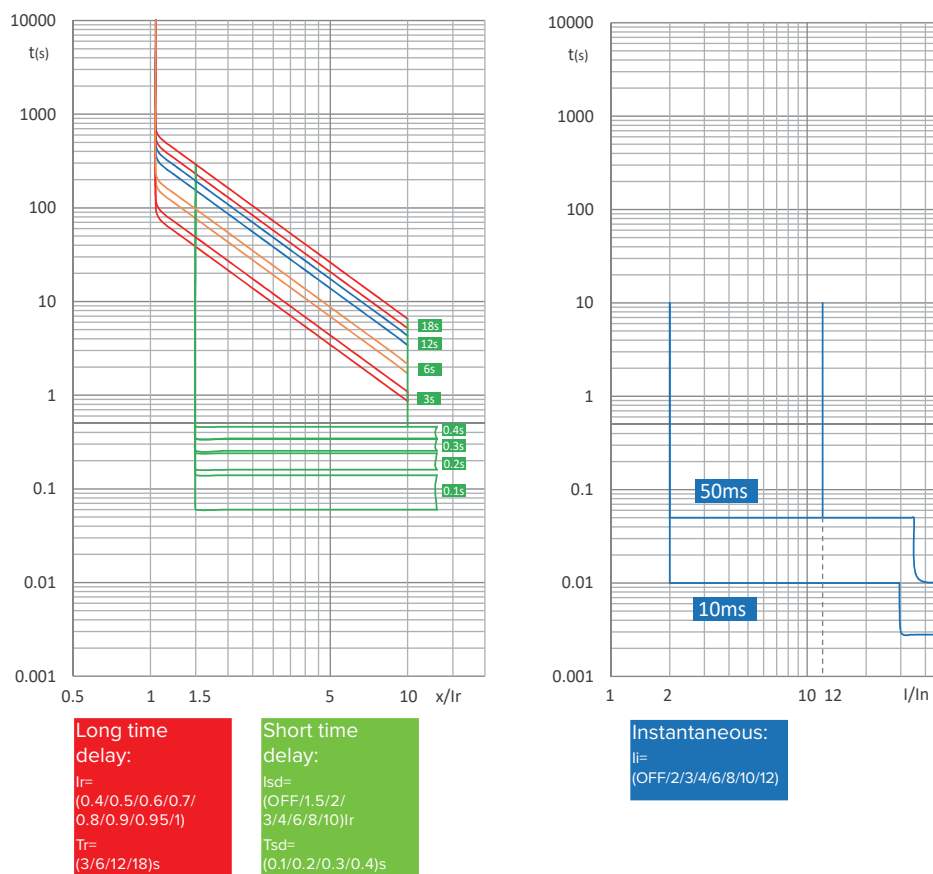
Technical Data **Ex9M3 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

Installation space



Tripping characteristics



Technical Data **Ex9M4 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

General parameters		
Suitable for commercial as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT24	103723 — 103730
Undervoltage releases	UVT24	103722 — 103740
Max. number of installed internal accessories is 2 pcs of AX21M, 1 pc of AL21M and 1 pc of a release (SHT24 or UVT24)		
External accessories		
Direct rotary handle	RHD24	103742
Extended rotary handle	ERH24	103741
Remote motor operators	MOD24	103743 — 103747
Terminal cover, short	TCV24 3P, 4P	103748, 103750
Terminal cover, long	TCE24 3P, 4P	103749, 104855
Phase barrier	PHS24	112113
Connection terminals	MC24 W2	106314
Withdrawable base	DOB24 SU20	108891, 108903, 108897, 108909
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Derating coefficient of Tripping Characteristics on accessories combination		
Combined accessory	$I_n (T) [A]$	
	630 A	
DOB 24 SU20	0.95	

Technical Data **Ex9M4 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

Electrical parameters					
	Ex9M4S	Ex9M4N	Ex9M4Q	Ex9M4H	Ex9M4P
Tested according to	IEC/EN 60947-2				
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC				
Rated insulation voltage U_i	1 000 V				
Rated impulse withstand voltage U_{imp}	12 kV				
Rated frequency	50/60 Hz				
Rated ultimate short-circuit breaking capacity I_{cu}	36 kA / 415 V 12 kA / 690 V	50 kA / 415 V 15 kA / 690 V	70 kA / 415 V 15 kA / 690 V	100 kA / 415 V 20 kA / 690 V	150 kA / 415 V 30 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	36 kA / 415 V 12 kA / 690 V	50 kA / 415 V 15 kA / 690 V	70 kA / 415 V 15 kA / 690 V	100 kA / 415 V 15 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated current	630 A				
Utilization category	B				
Rated short-time withstanding current I_{cw} 1s	10 kA				
Mechanical service life	10 000 operation cycles				
Electrical service life	3 000 operation cycles / 415 V AC 1 000 operation cycles / 690 V AC				
Total disconnection time at short circuit	< 2 ms				
Line voltage connection	arbitrary above or below				

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I_n (T) [A]
	630 A
-35	630
-25	630
-15	630
-5	630
0	630
10	630
20	630
30	630
40	630
50	600
60	570
70	540

Power dissipation characteristics

I_n	630 A
Pole resistance	0.12 mΩ
Pole power dissipation	47.6 W

Technical Data **Ex9M4 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A

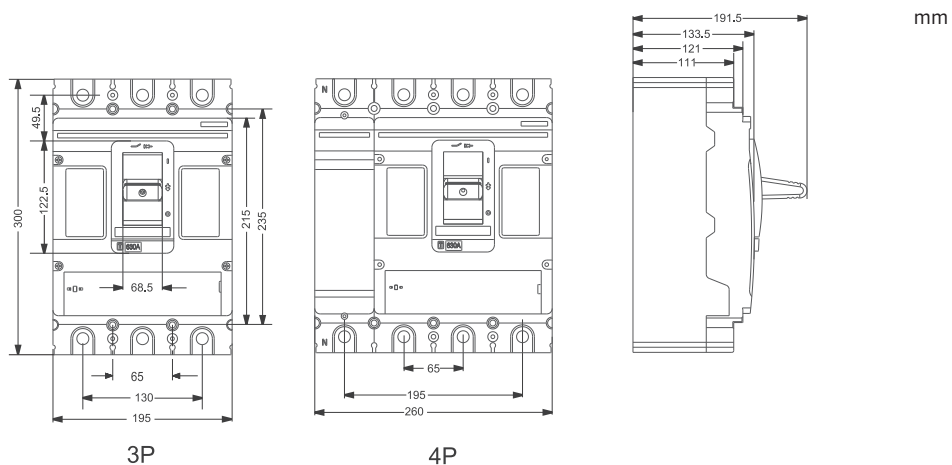
Mechanical parameters

Device width 3P / 4P	195 mm / 260 mm
Device height	300 mm
Device depth	142 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M12 screws
Busbar thickness	≤ 10 mm
Busbar width	≤ 50 mm
Cable lug width	≤ 50 mm
Fastening torque of terminals	30 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	10.5 kg / 13.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

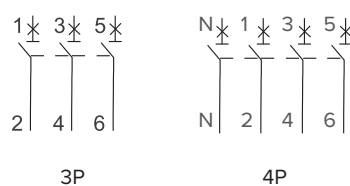
Derating coefficient of technical parameters based on altitude

Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	12 kV	10 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=12$ kV)	2550 V AC	2370 V AC	2200 V AC	2050 V AC

Dimensions

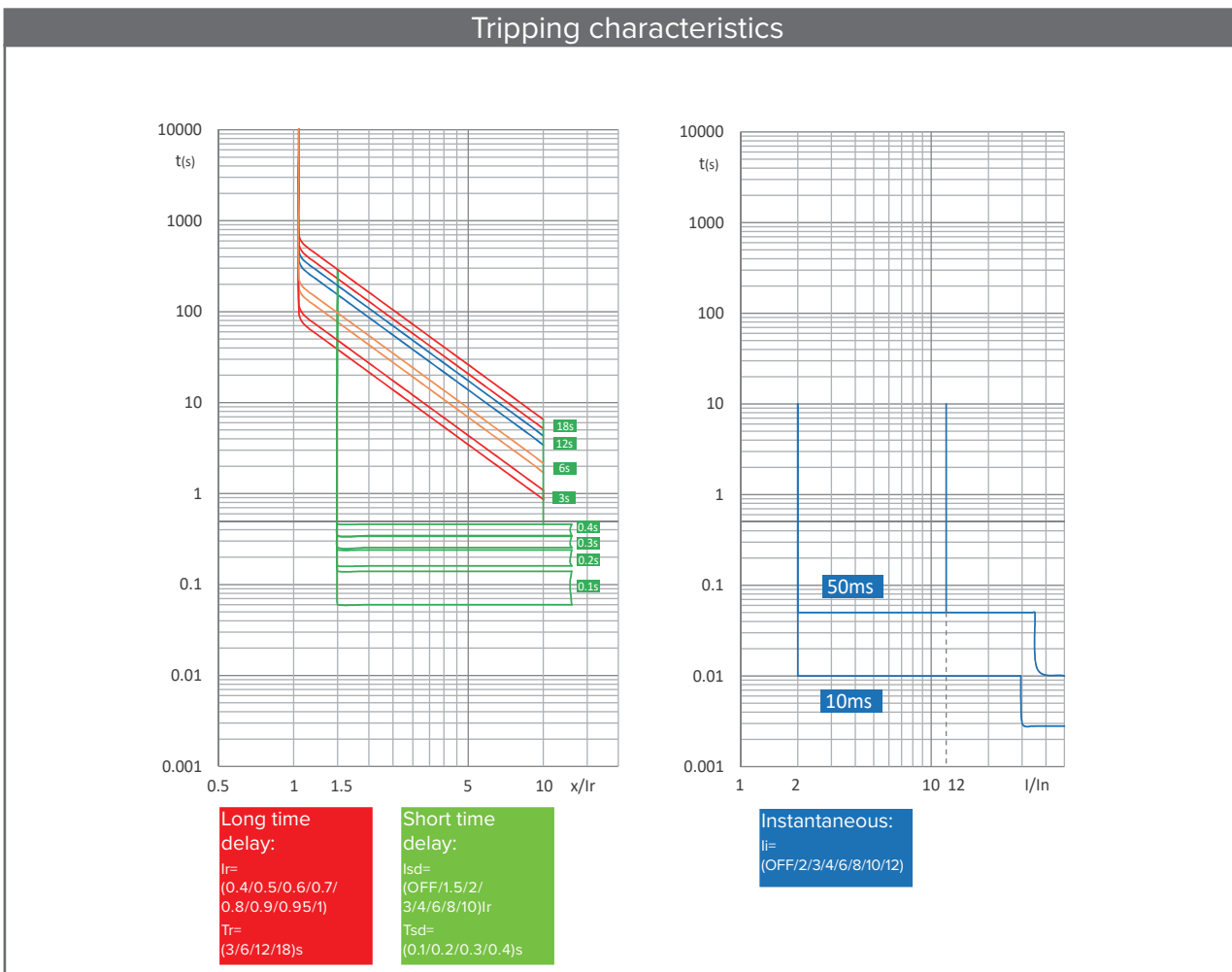
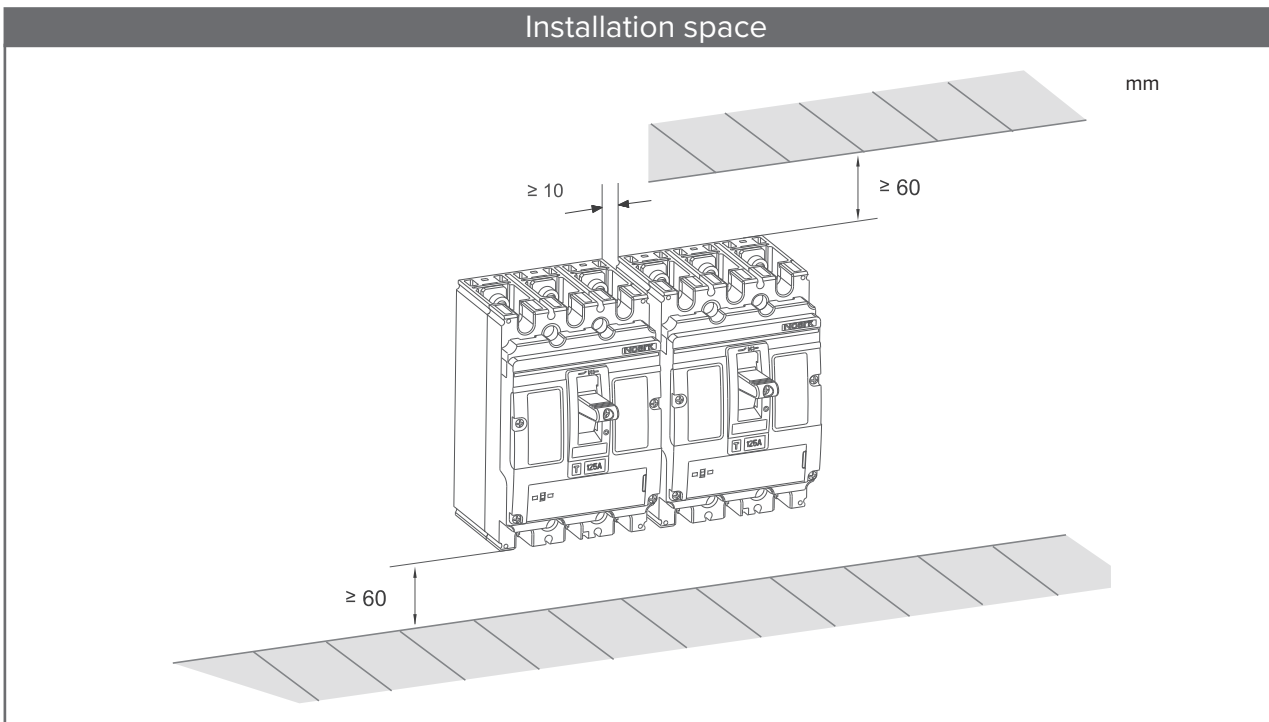


Wiring diagram



Technical Data **Ex9M4 SU20L**

SU20L Moulded Case Circuit Breakers up to 630 A



Technical Data **Ex9M5 SU20L**

SU20L Moulded Case Circuit Breakers up to 800 A

General parameters		
Suitable for commercial as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT24	103723 — 103730
Undervoltage releases	UVT24	103722 — 103740
Max. number of installed internal accessories is 2 pcs of AX21M, 1 pc of AL21M and 1 pc of a release (SHT24 or UVT24)		
External accessories		
Direct rotary handle	RHD24	103742
Extended rotary handle	ERH24	103741
Remote motor operators	MOD24	103743 — 103747
Terminal cover, short	TCV24 3P, 4P	103748, 103750
Terminal cover, long	TCE24 3P, 4P	103749, 104855
Phase barrier	PHS24	112113
Connection terminals	MC24 W2	106314
Withdrawable base	DOB24 SU20	108891, 108903, 108897, 108909
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Derating coefficient of Tripping Characteristics on accessories combination	
Combined accessory	I_n (T) [A]
	800 A
DOB 24 SU20	0.9

Technical Data **Ex9M5 SU20L**

SU20L Moulded Case Circuit Breakers up to 800 A

Electrical parameters					
	Ex9M5S	Ex9M5N	Ex9M5Q	Ex9M5H	Ex9M5P
Tested according to	IEC/EN 60947-2				
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC				
Rated insulation voltage U_i	1 000 V				
Rated impulse withstand voltage U_{imp}	12 kV				
Rated frequency	50/60 Hz				
Rated ultimate short-circuit breaking capacity I_{cu}	36 kA / 415 V 12 kA / 690 V	50 kA / 415 V 15 kA / 690 V	70 kA / 415 V 15 kA / 690 V	100 kA / 415 V 20 kA / 690 V	150 kA / 415 V 30 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	36 kA / 415 V 12 kA / 690 V	50 kA / 415 V 15 kA / 690 V	70 kA / 415 V 15 kA / 690 V	100 kA / 415 V 15 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated current	800 A				
Utilization category	B				
Rated short-time withstanding current I_{cw} 1s	10 kA				
Mechanical service life	10 000 operation cycles				
Electrical service life	3 000 operation cycles / 415 V AC 1 000 operation cycles / 690 V AC				
Total disconnection time at short circuit	< 2 ms				
Line voltage connection	arbitrary above or below				

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I_n (T) [A]
	800 A
-35	800
-25	800
-15	800
-5	800
0	800
10	800
20	800
30	800
40	800
50	760
60	720
70	680

Power dissipation characteristics

I_n	800 A
Pole resistance	0.08 mΩ
Pole power dissipation	51.2 W

Technical Data **Ex9M5 SU20L**

Moulded Case Circuit Breakers up to 800 A

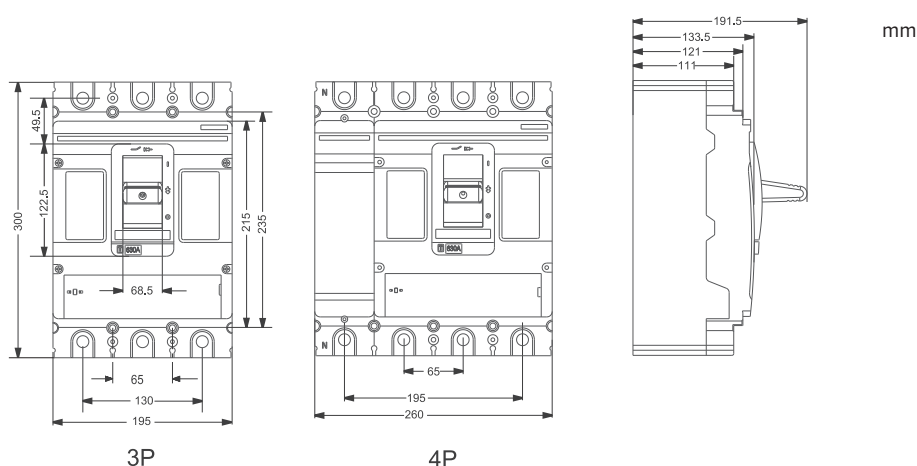
Mechanical parameters

Device width 3P / 4P	195 mm / 260 mm
Device height	300 mm
Device depth	142 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M12 screws
Busbar thickness	≤ 10 mm
Busbar width	≤ 50 mm
Cable lug width	≤ 50 mm
Fastening torque of terminals	30 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	10.5 kg / 13.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

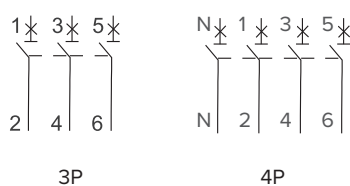
Derating coefficient of technical parameters based on altitude

Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	12 kV	10 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=12$ kV)	2550 V AC	2370 V AC	2200 V AC	2050 V AC

Dimensions



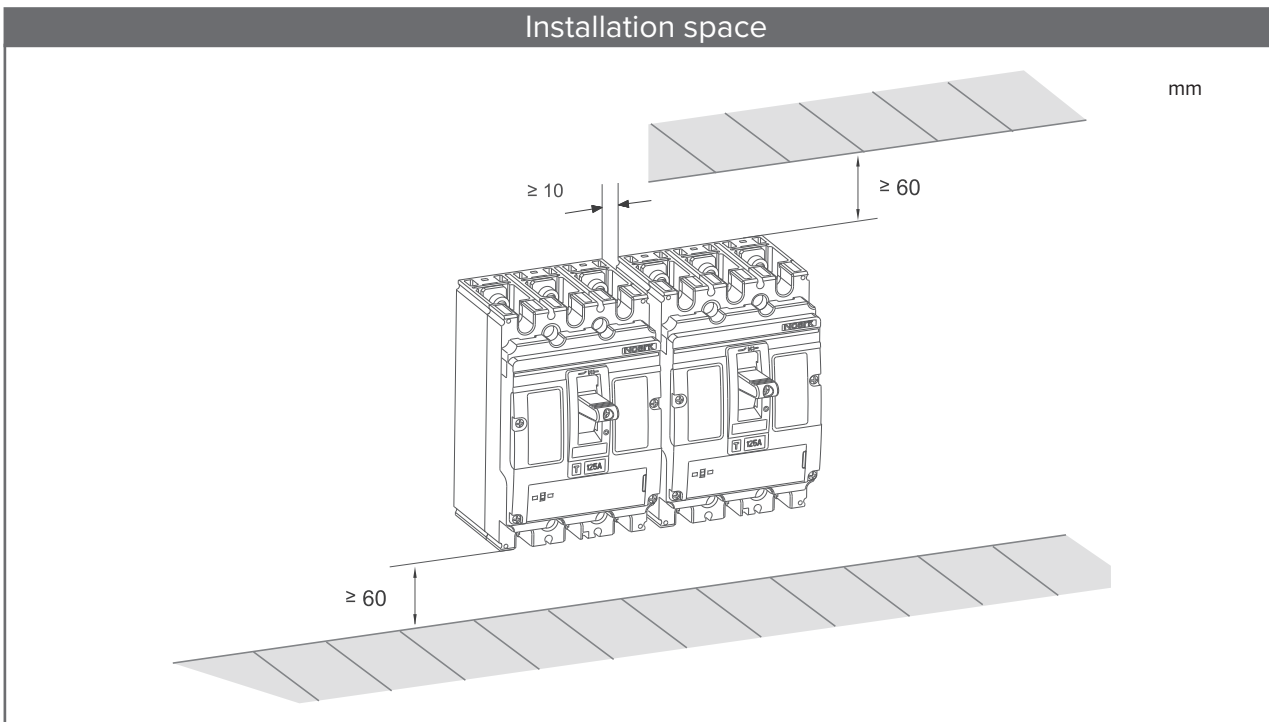
Wiring diagram



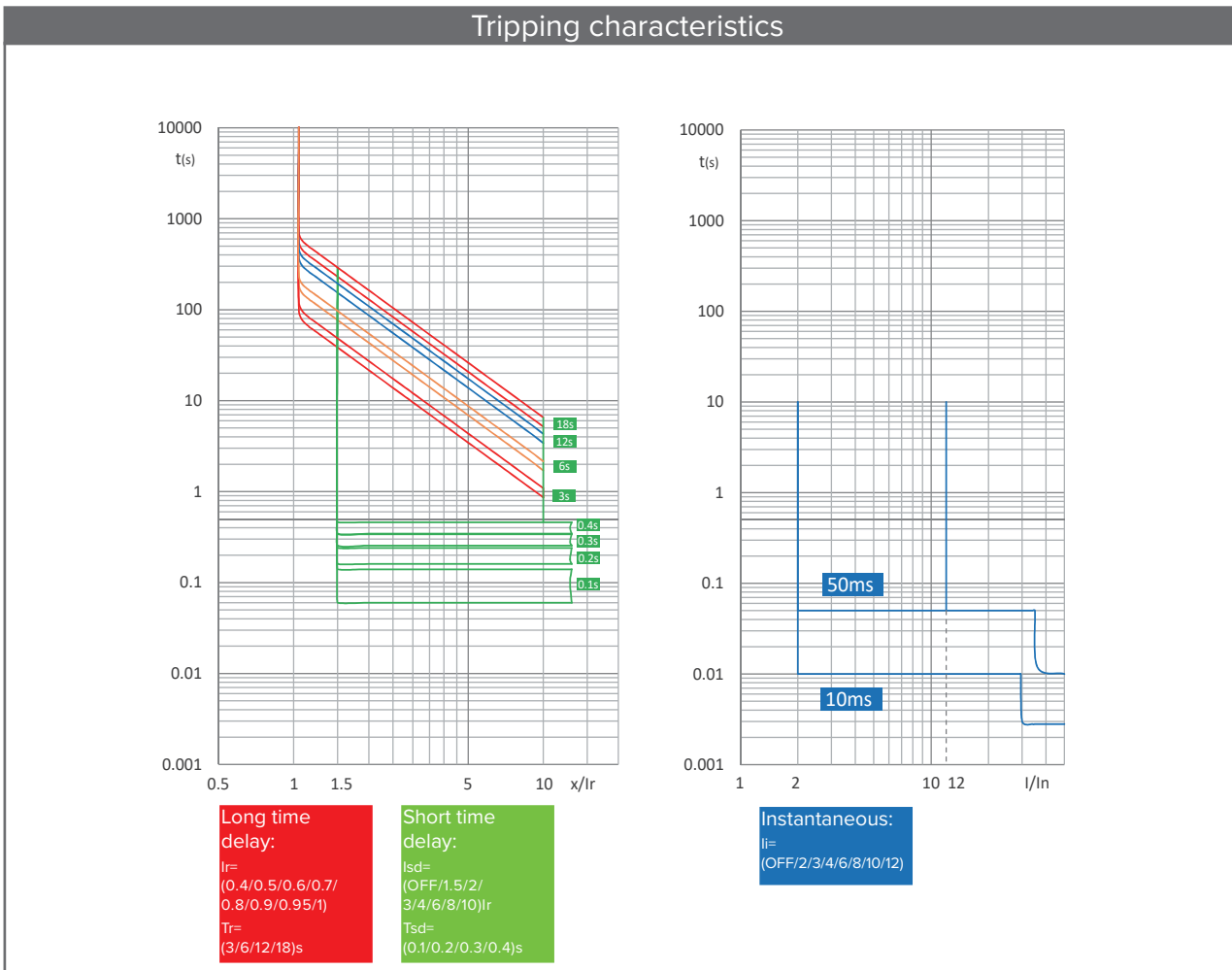
Technical Data **Ex9M5 SU20L**

Moulded Case Circuit Breakers up to 800 A

Installation space



Tripping characteristics



Technical Data **Ex9M6 SU20L**

Moulded Case Circuit Breakers up to 1600 A

General parameters		
Suitable for household as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT26	110460 — 110467
Undervoltage releases	UVT26	110468 — 110469, 112073 — 112078
Max. number of installed internal accessories is 2 pcs of AX21M, 1 pc of AL21M and 1 pc of a release (SHT26 or UVT26)		
External accessories		
Extended handle	LHD26	110698
Extended rotary handle	ERH26	110718
Front connection plate	JP26	110694 — 110697
Connection terminals	MC26 Wi	112091 / 112092
Phase barrier	PHS26	112114
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Technical Data **Ex9M6 SU20L**

Moulded Case Circuit Breakers up to 1600 A

Electrical parameters			
	Ex9M6N	Ex9M6Q	Ex9M6H
Tested according to	IEC/EN 60947-2		
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC		
Rated insulation voltage U_i	1 000 V		
Rated impulse withstand voltage U_{imp}	12 kV		
Rated frequency	50/60 Hz		
Rated ultimate short-circuit breaking capacity I_{cu}	50 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V	100 kA / 415 V 30 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	50 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V
Rated current	800 / 1000 / 1 250 / 1 600 A		
Utilization category	B		
Rated short-time withstanding current I_{cw} 1s	20 kA		
Mechanical service life	6 000 operation cycles		
Electrical service life	1 000 operation cycles / 415 V AC 1 000 operation cycles / 690 V AC		
Total disconnection time at short circuit	< 10 ms		
Line voltage connection	line voltage on top, load on bottom		

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I_n (T) [A]			
	800 A	1 000 A	1 250 A	1 600 A
-35	800	1 000 A	1 250 A	1 600 A
-25	800	1 000 A	1 250 A	1 600 A
-15	800	1 000 A	1 250 A	1 600 A
-5	800	1 000 A	1 250 A	1 600 A
0	800	1 000 A	1 250 A	1 600 A
10	800	1 000 A	1 250 A	1 600 A
20	800	1 000 A	1 250 A	1 600 A
30	800	1 000 A	1 250 A	1 600 A
40	800	1 000 A	1 250 A	1 600 A
50	800	1 000 A	1 250 A	1 520 A
60	800	1 000 A	1 250 A	1 440 A
70	800	1 000 A	1 250 A	1 360 A

Power dissipation characteristics

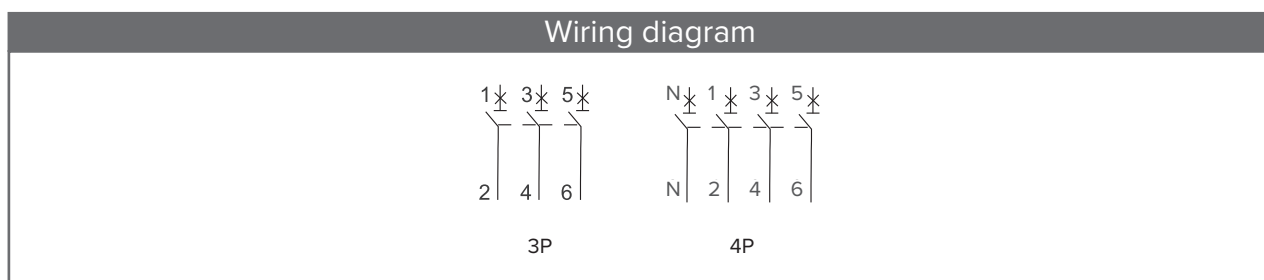
I_n	800 A	1 000 A	1 250 A	1 600 A
Pole resistance	0.08 mΩ	0.08 mΩ	0.04 mΩ	0.04 mΩ
Pole power dissipation	51.2 W	80.0 W	62.5 W	102.4 W

Technical Data **Ex9M6 SU20L**

Moulded Case Circuit Breakers up to 1600 A

Mechanical parameters	
Device width 3P / 4P	210 mm / 280 mm
Device height	286 mm
Device depth	191 (198) mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M10 screws
Busbar thickness	≤ 10 mm
Busbar width	≤ 50 mm
Cable lug width	≤ 50 mm
Fastening torque of terminals	25 — 30 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	13.5 / 17.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

Derating coefficient of technical parameters based on altitude				
Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=8$ kV)	2200 V AC	2050 V AC	1900 V AC	1770 V AC

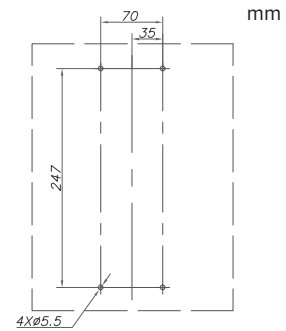
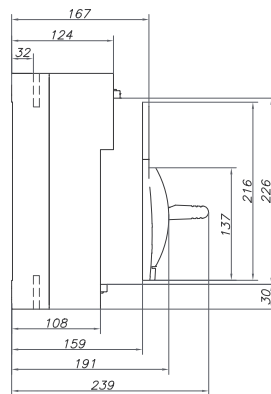
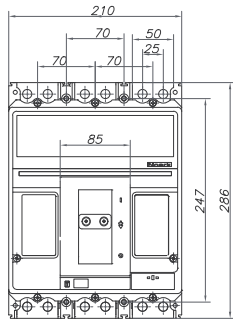


Technical Data **Ex9M6 SU20L**

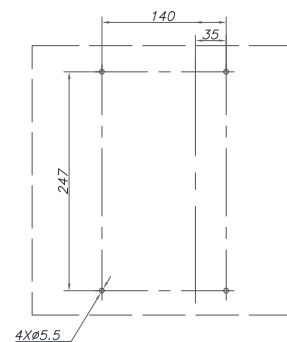
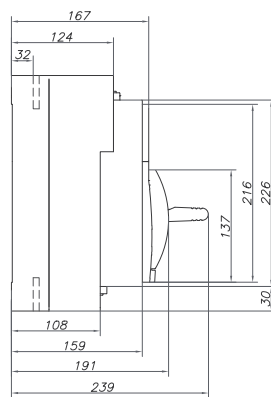
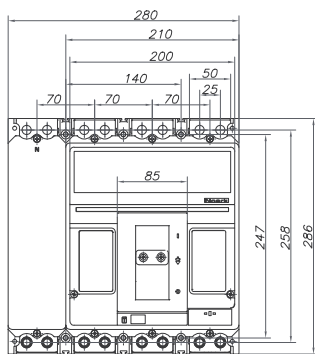
Moulded Case Circuit Breakers up to 1600 A

Dimensions

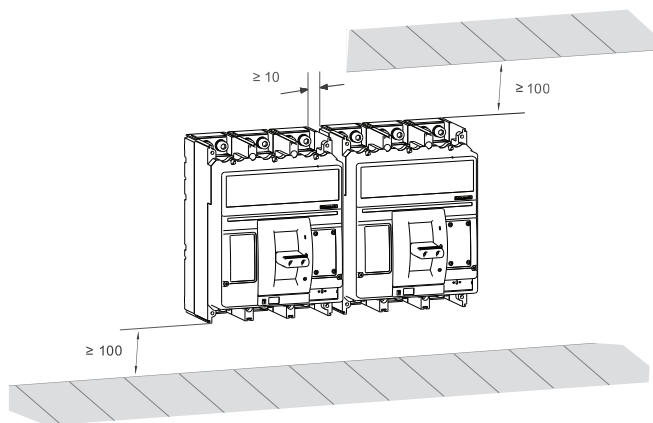
3P



4P



Installation space

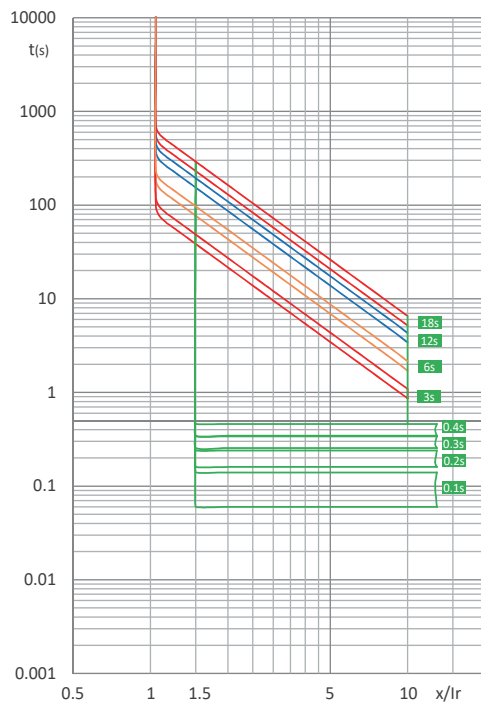


mm

Technical Data **Ex9M6 SU20L**

Moulded Case Circuit Breakers up to 1600 A

Tripping characteristics

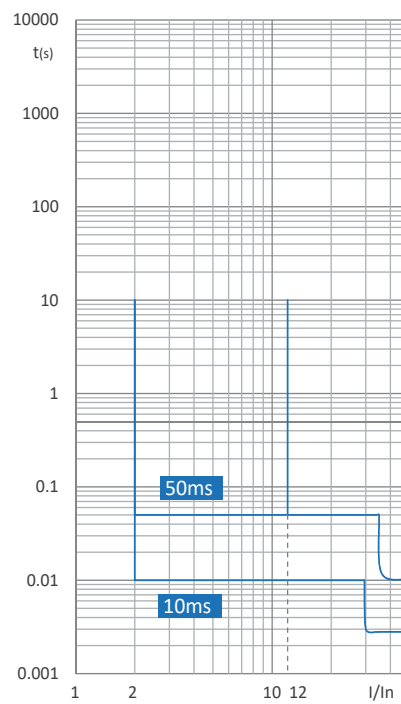


Long time delay:

$I_r =$
(0.4/0.5/0.6/0.7/
0.8/0.9/0.95/1)
 $T_r =$
(3/6/12/18)s

Short time delay:

$I_{sd} =$
(OFF/1.5/2/
3/4/6/8/10) I_r
 $T_{sd} =$
(0.1/0.2/0.3/0.4)s



Instantaneous:

$I_i =$
(OFF/2/3/4/6/8/10/12)

Technical Data **Ex9M6 MOD SU20L**

Moulded Case Circuit Breakers up to 1600 A

General parameters		
Suitable for household as well as industrial applications		
I_r can be set in range $(0.4 - 1.0) \times I_n$		
I_i can be set in range $(2 - 12) \times I_n$		
Internal accessories		
Auxiliary contact unit	AX21M	112071
Alarm contact unit	AL21M	112072
Shunt trip releases	SHT26	110460 — 110467
Undervoltage releases	UVT26	110468 — 110469, 112073 — 112078
Max. number of installed internal accessories is 2 pcs of AX21, 1 pc of AL21 and 1 pc of a release (SHT26 or UVT26)		
External accessories		
Front connection plate	JP26	110694 — 110697
Connection terminals	MC26 Wi	112091 — 112092
Phase barrier	PHS26	112114
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Technical Data **Ex9M6 MOD SU20L**

Moulded Case Circuit Breakers up to 1600 A

Electrical parameters			
	Ex9M6N	Ex9M6Q	Ex9M6H
Tested according to	IEC/EN 60947-2		
Rated op. voltage U_e	380 / 400 / 415, 440, 500, 660 / 690 V AC		
Rated insulation voltage U_i	1 000 V		
Rated impulse withstand voltage U_{imp}	12 kV		
Rated frequency	50/60 Hz		
Rated ultimate short-circuit breaking capacity I_{cu}	50 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V	100 kA / 415 V 30 kA / 690 V
Rated service short-circuit breaking capacity I_{cs}	50 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V	70 kA / 415 V 30 kA / 690 V
Rated current	800 / 1000 / 1 250 / 1 600 A		
Utilization category	B		
Rated short-time withstanding current I_{cw} 1s	20 kA		
Mechanical service life	6 000 operation cycles		
Electrical service life	1 000 operation cycles / 415 V AC 1 000 operation cycles / 690 V AC		
Total disconnection time at short circuit	< 10 ms		
Line voltage connection	line voltage on top, load on bottom		

Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	I_n (T) [A]			
	800 A	1 000 A	1 250 A	1 600 A
-35	800	1 000 A	1 250 A	1 600 A
-25	800	1 000 A	1 250 A	1 600 A
-15	800	1 000 A	1 250 A	1 600 A
-5	800	1 000 A	1 250 A	1 600 A
0	800	1 000 A	1 250 A	1 600 A
10	800	1 000 A	1 250 A	1 600 A
20	800	1 000 A	1 250 A	1 600 A
30	800	1 000 A	1 250 A	1 600 A
40	800	1 000 A	1 250 A	1 600 A
50	800	1 000 A	1 250 A	1 520 A
60	800	1 000 A	1 250 A	1 440 A
70	800	1 000 A	1 250 A	1 360 A

Power dissipation characteristics

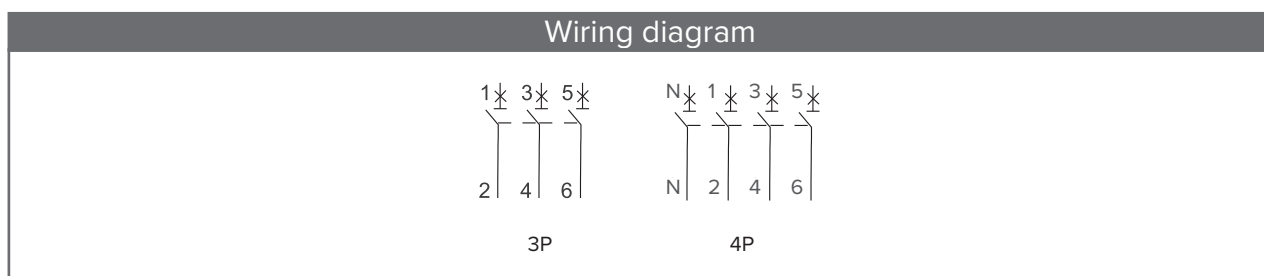
I_n	800 A	1 000 A	1 250 A	1 600 A
Pole resistance	0.08 mΩ	0.08 mΩ	0.04 mΩ	0.04 mΩ
Pole power dissipation	51.2 W	80.0 W	62.5 W	102.4 W

Technical Data **Ex9M6 MOD SU20L**

Moulded Case Circuit Breakers up to 1600 A

Mechanical parameters	
Device width 3P / 4P	210 mm / 280 mm
Device height	286 mm
Device depth	198 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M10 screws
Busbar thickness	≤ 10 mm
Busbar width	≤ 50 mm
Cable lug width	≤ 50 mm
Fastening torque of terminals	25 — 30 Nm
Ambient temperature	-35 — +70 °C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3
Weight 3P / 4P	16 / 20 kg
Mounting position	vertical, can be rotated by 90° in each axis

Derating coefficient of technical parameters based on altitude				
Altitude	≤ 2 000 m	3 000 m	4 000 m	5 000 m
Derating op. current I_n coefficient	1	0.96	0.93	0.9
Maximum rated op. voltage U_e	690 V AC	550 V AC	480 V AC	420 V AC
Rated insulation voltage U_i	1000 V AC	930 V AC	870 V AC	800 V AC
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV
Dielectric properties ($U_{imp}=8$ kV)	2200 V AC	2050 V AC	1900 V AC	1770 V AC

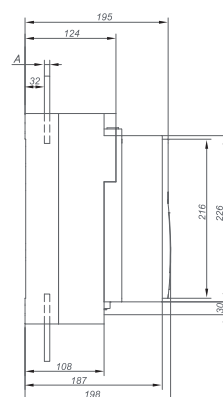
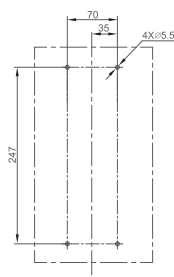
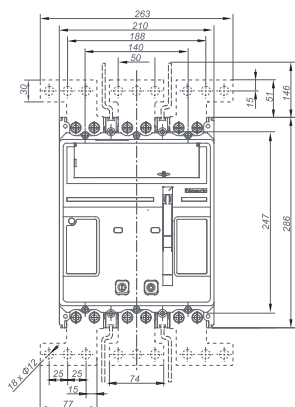


Technical Data **Ex9M6 MOD SU20L**

Moulded Case Circuit Breakers up to 1600 A

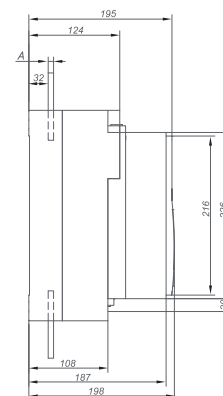
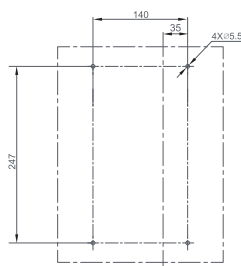
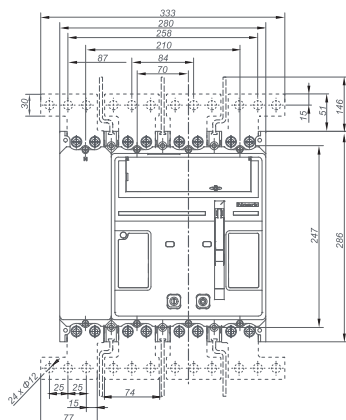
Dimensions

3P



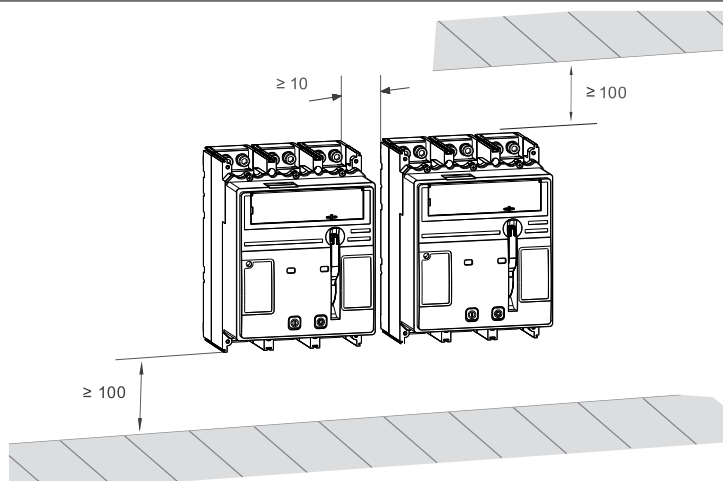
mm

4P



In [A]	800, 1000, 1250	1600
A [mm]	10	20

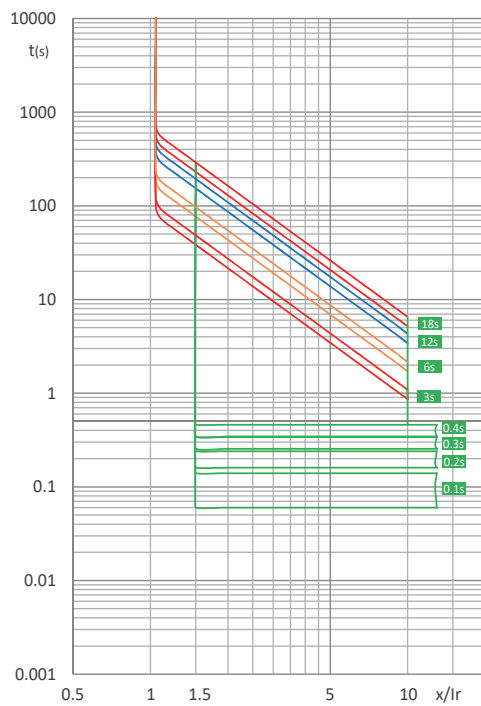
Installation space



mm

Moulded Case Circuit Breakers up to 1600 A

Tripping characteristics

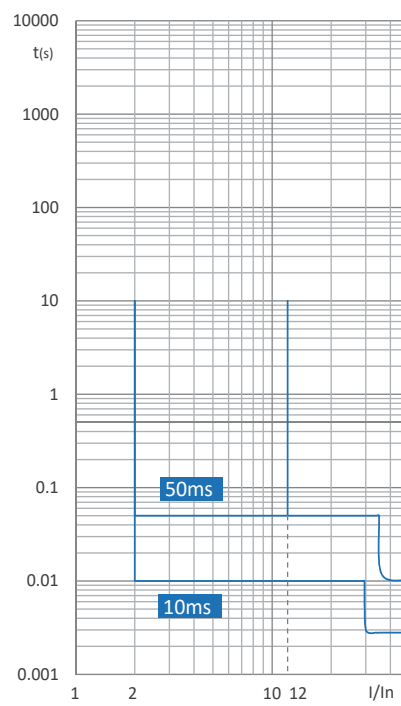


Long time delay:

$I_r =$
(0.4/0.5/0.6/0.7/
0.8/0.9/0.95/1)
 $T_r =$
(3/6/12/18)s

Short time delay:

$I_{sd} =$
(OFF/1.5/2/
3/4/6/8/10) I_r
 $T_{sd} =$
(0.1/0.2/0.3/0.4)s



Instantaneous:

$I_i =$
(OFF/2/3/4/6/8/10/12)

Technical Data **Ex9M6 MOD SU20L**

Motor operated SU20L MCCBs up to 1600 A

Remote motor operator MOD (MOD version only)

General parameters

The electric motor charges the spring mechanism when the circuit breaker is closed

The electric motor MOD is equipped with a limit switch which signals the “charged” position of the mechanism (spring is charged)

The spring-mechanism charging handle can be used when maintaining or without power supply

Electrical parameters

Operating voltage U_e	230 V AC 400 V AC 24 V DC 110 V DC 220 V DC
Operating frequency	1 operating cycle in 3 minutes
Operating threshold	85 — 110% U_e
Power consumption AC DC	40 VA 40 W
Charging time	≤ 4 s
Insulation voltage	400 V
Peak current	$6 \times I_n$

Technical Data **Ex9M6 MOD SU20L**

Motor operated SU20L MCCBs up to 1600 A

Closing releases XF (MOD version only)

General parameters

Remotely close the breaker after the spring has stored energy

Operating voltage range 85 - 110% of nominal value U_e . Maximum allowed control command length 2 s (can be blocked e.g. by means of NC auxiliary contact, see below)

Electrical parameters

Operating voltage U_e	230 V AC 400 V AC 110 V DC 220 V DC
Operating threshold	85 — 110% U_e
Minimum duration of control impuls	0.2 s
Max. allowed duration of control impuls	2 s
Pick-up power time 100ms AC DC	200 VA 200 W
Power consumption AC DC	5 VA 5 W
Circuit breaker closing time	≤ 50 ms
Breaking time	30 ± 10 ms
Insulation voltage	400 V
Peak current	6 × I_n