

# Moulded Case Circuit Breakers Ex9M



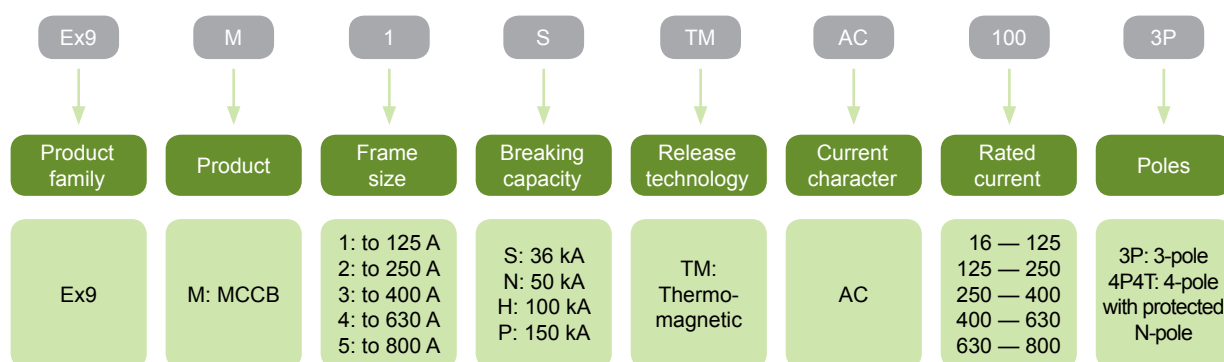
- Moulded Case Circuit Breakers
- Frame sizes M1-M5
- Rated current up to 800 A
- 3 and 4-pole versions
- Rated ultimate short circuit breaking capacity  $I_{cu}$  up to 150 kA,  $I_{cs} = 100\% I_{cu}$
- Rated voltage 415 / 690 V AC
- Thermomagnetic releases
- Fixed versions

Moulded Case Circuit Breakers Ex9M TM are intended for applications in power distribution mainly. Testing according to IEC / EN 60947-2 standards ensures functions and reliability for wide variety of applications including isolation.

These breakers are offered with breaking capacities from 36 kA up to extreme 150 kA. Rated impulse withstand voltage  $U_{imp}$  8 kV makes it possible to use them even in system with occurrences of transient overvoltage waves of high intensity, e.g. in heavy industry.

Utilization category A circuit breakers.

## Type Key

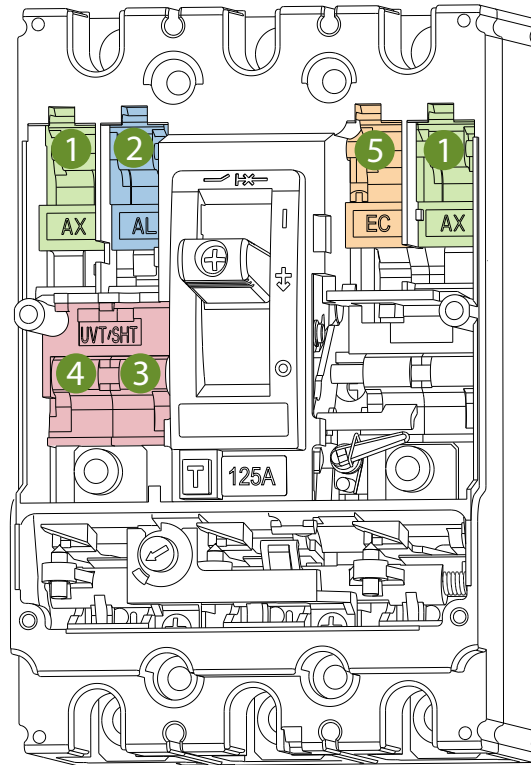


## Certification marks



# Moulded Case Circuit Breakers Ex9M

## Internal accessories



1

Auxiliary contact  
**AX21**

2

Signal contact  
**AL21**

3

Shunt trip release  
**SHT2i**  
1 unit or UVT2i

4

Undervoltage release  
**UVT2i**  
1 unit or SHT2i

5

Early-make  
auxiliary contact  
**EC 2i**

Auxiliary contact AX21

Signal contact AL21

Shunt trip releases SHT2i

Undervoltage releases UVT2i

Early-make auxiliary contact EC 2i

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

# Moulded Case Circuit Breakers Ex9M

## External accessories



Phase barriers  
**PB2i**



Terminal cover, short  
**TCV2i**



Terminal cover, long  
**TCE2i**



Box terminals  
**MC2i**



Tunnel terminals  
**MC2i W**



Mounting depth spacers  
**WG i**



Remote operator  
**MOD2i**



Direct rotary handle  
**RHD2i**



Extended rotary handle  
**ERH2i**

Phase barriers PB2i

Terminal cover, short TCV2i

Terminal cover, long TCE2i

Remote operators MOD2i

Direct rotary handles RHD2i

Extended rotary handles ERH2i

Connection terminals MC2i

Mounting depth spacers WG i

# Moulded Case Circuit Breakers Ex9M1

## Version Ex9M1S up to 125 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  fixed as  $10 \times I_n$
- 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	16 A	12.8—16 A	160 A	100886	Ex9M1S TM AC16 3P	1/8
3	20 A	16—20 A	200 A	100887	Ex9M1S TM AC20 3P	1/8
3	25 A	20—25 A	250 A	100888	Ex9M1S TM AC25 3P	1/8
3	32 A	25.6—32 A	320 A	100889	Ex9M1S TM AC32 3P	1/8
3	40 A	32—40 A	400 A	100890	Ex9M1S TM AC40 3P	1/8
3	50 A	40—50 A	500 A	100891	Ex9M1S TM AC50 3P	1/8
3	63 A	50.4—63 A	630 A	100892	Ex9M1S TM AC63 3P	1/8
3	80 A	64—80 A	800 A	100893	Ex9M1S TM AC80 3P	1/8
3	100 A	80—100 A	1000 A	100894	Ex9M1S TM AC100 3P	1/8
3	125 A	100—125 A	1250 A	100895	Ex9M1S TM AC125 3P	1/8
4	16 A	12.8—16 A	160 A	103062	Ex9M1S TM AC16 4P4T	1/8
4	20 A	16—20 A	200 A	103063	Ex9M1S TM AC20 4P4T	1/8
4	25 A	20—25 A	250 A	103064	Ex9M1S TM AC25 4P4T	1/8
4	32 A	25.6—32 A	320 A	103065	Ex9M1S TM AC32 4P4T	1/8
4	40 A	32—40 A	400 A	103066	Ex9M1S TM AC40 4P4T	1/8
4	50 A	40—50 A	500 A	103067	Ex9M1S TM AC50 4P4T	1/8
4	63 A	50.4—63 A	630 A	103068	Ex9M1S TM AC63 4P4T	1/8
4	80 A	64—80 A	800 A	103069	Ex9M1S TM AC80 4P4T	1/8
4	100 A	80—100 A	1000 A	103070	Ex9M1S TM AC100 4P4T	1/8
4	125 A	100—125 A	1250 A	103071	Ex9M1S TM AC125 4P4T	1/8

## Version Ex9M1N up to 125 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  fixed as  $10 \times I_n$
- 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	16 A	12.8—16 A	160 A	100896	Ex9M1N TM AC16 3P	1/8
3	20 A	16—20 A	200 A	100897	Ex9M1N TM AC20 3P	1/8
3	25 A	20—25 A	250 A	100898	Ex9M1N TM AC25 3P	1/8
3	32 A	25.6—32 A	320 A	100899	Ex9M1N TM AC32 3P	1/8
3	40 A	32—40 A	400 A	100900	Ex9M1N TM AC40 3P	1/8
3	50 A	40—50 A	500 A	100901	Ex9M1N TM AC50 3P	1/8
3	63 A	50.4—63 A	630 A	100902	Ex9M1N TM AC63 3P	1/8
3	80 A	64—80 A	800 A	100903	Ex9M1N TM AC80 3P	1/8
3	100 A	80—100 A	1000 A	100904	Ex9M1N TM AC100 3P	1/8
3	125 A	100—125 A	1250 A	100905	Ex9M1N TM AC125 3P	1/8
4	16 A	12.8—16 A	160 A	103072	Ex9M1N TM AC16 4P4T	1/8
4	20 A	16—20 A	200 A	103073	Ex9M1N TM AC20 4P4T	1/8
4	25 A	20—25 A	250 A	103074	Ex9M1N TM AC25 4P4T	1/8
4	32 A	25.6—32 A	320 A	103075	Ex9M1N TM AC32 4P4T	1/8
4	40 A	32—40 A	400 A	103076	Ex9M1N TM AC40 4P4T	1/8
4	50 A	40—50 A	500 A	103077	Ex9M1N TM AC50 4P4T	1/8
4	63 A	50.4—63 A	630 A	103078	Ex9M1N TM AC63 4P4T	1/8
4	80 A	64—80 A	800 A	103079	Ex9M1N TM AC80 4P4T	1/8
4	100 A	80—100 A	1000 A	103080	Ex9M1N TM AC100 4P4T	1/8
4	125 A	100—125 A	1250 A	103081	Ex9M1N TM AC125 4P4T	1/8

# Moulded Case Circuit Breakers Ex9M1

## Version Ex9M1H up to 125 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  fixed as  $10 \times I_n$
- 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	16 A	12.8—16 A	160 A	100926	Ex9M1H TM AC16 3P	1/8
3	20 A	16—20 A	200 A	100927	Ex9M1H TM AC20 3P	1/8
3	25 A	20—25 A	250 A	100928	Ex9M1H TM AC25 3P	1/8
3	32 A	25.6—32 A	320 A	100929	Ex9M1H TM AC32 3P	1/8
3	40 A	32—40 A	400 A	100930	Ex9M1H TM AC40 3P	1/8
3	50 A	40—50 A	500 A	100931	Ex9M1H TM AC50 3P	1/8
3	63 A	50.4—63 A	630 A	100932	Ex9M1H TM AC63 3P	1/8
3	80 A	64—80 A	800 A	100933	Ex9M1H TM AC80 3P	1/8
3	100 A	80—100 A	1000 A	100934	Ex9M1H TM AC100 3P	1/8
3	125 A	100—125 A	1250 A	100935	Ex9M1H TM AC125 3P	1/8
4	16 A	12.8—16 A	160 A	103102	Ex9M1H TM AC16 4P4T	1/8
4	20 A	16—20 A	200 A	103103	Ex9M1H TM AC20 4P4T	1/8
4	25 A	20—25 A	250 A	103104	Ex9M1H TM AC25 4P4T	1/8
4	32 A	25.6—32 A	320 A	103105	Ex9M1H TM AC32 4P4T	1/8
4	40 A	32—40 A	400 A	103106	Ex9M1H TM AC40 4P4T	1/8
4	50 A	40—50 A	500 A	103107	Ex9M1H TM AC50 4P4T	1/8
4	63 A	50.4—63 A	630 A	103108	Ex9M1H TM AC63 4P4T	1/8
4	80 A	64—80 A	800 A	103109	Ex9M1H TM AC80 4P4T	1/8
4	100 A	80—100 A	1000 A	103110	Ex9M1H TM AC100 4P4T	1/8
4	125 A	100—125 A	1250 A	103111	Ex9M1H TM AC125 4P4T	1/8

## Version Ex9M1P up to 125 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  fixed as  $10 \times I_n$
- 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	16 A	12.8—16 A	160 A	100946	Ex9M1P TM AC16 3P	1/8
3	20 A	16—20 A	200 A	100947	Ex9M1P TM AC20 3P	1/8
3	25 A	20—25 A	250 A	100948	Ex9M1P TM AC25 3P	1/8
3	32 A	25.6—32 A	320 A	100949	Ex9M1P TM AC32 3P	1/8
3	40 A	32—40 A	400 A	100950	Ex9M1P TM AC40 3P	1/8
3	50 A	40—50 A	500 A	100951	Ex9M1P TM AC50 3P	1/8
3	63 A	50.4—63 A	630 A	100952	Ex9M1P TM AC63 3P	1/8
3	80 A	64—80 A	800 A	100953	Ex9M1P TM AC80 3P	1/8
3	100 A	80—100 A	1000 A	100954	Ex9M1P TM AC100 3P	1/8
3	125 A	100—125 A	1250 A	100955	Ex9M1P TM AC125 3P	1/8
4	16 A	12.8—16 A	160 A	103122	Ex9M1P TM AC16 4P4T	1/8
4	20 A	16—20 A	200 A	103123	Ex9M1P TM AC20 4P4T	1/8
4	25 A	20—25 A	250 A	103124	Ex9M1P TM AC25 4P4T	1/8
4	32 A	25.6—32 A	320 A	103125	Ex9M1P TM AC32 4P4T	1/8
4	40 A	32—40 A	400 A	103126	Ex9M1P TM AC40 4P4T	1/8
4	50 A	40—50 A	500 A	103127	Ex9M1P TM AC50 4P4T	1/8
4	63 A	50.4—63 A	630 A	103128	Ex9M1P TM AC63 4P4T	1/8
4	80 A	64—80 A	800 A	103129	Ex9M1P TM AC80 4P4T	1/8
4	100 A	80—100 A	1000 A	103130	Ex9M1P TM AC100 4P4T	1/8
4	125 A	100—125 A	1250 A	103131	Ex9M1P TM AC125 4P4T	1/8

# Moulded Case Circuit Breakers Ex9M2

## Version Ex9M2S up to 250 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- 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	125 A	100-125 A	625-1250	101293	Ex9M2S TM AC125 3P	1/4
3	160 A	128-160 A	800-1600	101294	Ex9M2S TM AC160 3P	1/4
3	180 A	144-180 A	900-1800	101295	Ex9M2S TM AC180 3P	1/4
3	200 A	160-200 A	1000-2000	101296	Ex9M2S TM AC200 3P	1/4
3	225 A	180-225 A	1125-2250	101297	Ex9M2S TM AC225 3P	1/4
3	250 A	200-250 A	1250-2500	101298	Ex9M2S TM AC250 3P	1/4
4	125 A	100-125 A	625-1250	103132	Ex9M2S TM AC125 4P4T	1/4
4	160 A	128-160 A	800-1600	103133	Ex9M2S TM AC160 4P4T	1/4
4	180 A	144-180 A	900-1800	103134	Ex9M2S TM AC180 4P4T	1/4
4	200 A	160-200 A	1000-2000	103135	Ex9M2S TM AC200 4P4T	1/4
4	225 A	180-225 A	1125-2250	103136	Ex9M2S TM AC225 4P4T	1/4
4	250 A	200-250 A	1250-2500	103137	Ex9M2S TM AC250 4P4T	1/4

## Version Ex9M2N up to 250 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- 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	125 A	100-125 A	625-1250	101299	Ex9M2N TM AC125 3P	1/4
3	160 A	128-160 A	800-1600	101300	Ex9M2N TM AC160 3P	1/4
3	180 A	144-180 A	900-1800	101301	Ex9M2N TM AC180 3P	1/4
3	200 A	160-200 A	1000-2000	101302	Ex9M2N TM AC200 3P	1/4
3	225 A	180-225 A	1125-2250	101303	Ex9M2N TM AC225 3P	1/4
3	250 A	200-250 A	1250-2500	101304	Ex9M2N TM AC250 3P	1/4
4	125 A	100-125 A	625-1250	103138	Ex9M2N TM AC125 4P4T	1/4
4	160 A	128-160 A	800-1600	103139	Ex9M2N TM AC160 4P4T	1/4
4	180 A	144-180 A	900-1800	103140	Ex9M2N TM AC180 4P4T	1/4
4	200 A	160-200 A	1000-2000	103141	Ex9M2N TM AC200 4P4T	1/4
4	225 A	180-225 A	1125-2250	103142	Ex9M2N TM AC225 4P4T	1/4
4	250 A	200-250 A	1250-2500	103143	Ex9M2N TM AC250 4P4T	1/4

# Moulded Case Circuit Breakers Ex9M2

## 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- 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	125 A	100-125 A	625-1250	101317	Ex9M2H TM AC125 3P	1/4
3	160 A	128-160 A	800-1600	101318	Ex9M2H TM AC160 3P	1/4
3	180 A	144-180 A	900-1800	101319	Ex9M2H TM AC180 3P	1/4
3	200 A	160-200 A	1000-2000	101320	Ex9M2H TM AC200 3P	1/4
3	225 A	180-225 A	1125-2250	101321	Ex9M2H TM AC225 3P	1/4
3	250 A	200-250 A	1250-2500	101322	Ex9M2H TM AC250 3P	1/4
4	125 A	100-125 A	625-1250	103156	Ex9M2H TM AC125 4P4T	1/4
4	160 A	128-160 A	800-1600	103157	Ex9M2H TM AC160 4P4T	1/4
4	180 A	144-180 A	900-1800	103158	Ex9M2H TM AC180 4P4T	1/4
4	200 A	160-200 A	1000-2000	103159	Ex9M2H TM AC200 4P4T	1/4
4	225 A	180-225 A	1125-2250	103160	Ex9M2H TM AC225 4P4T	1/4
4	250 A	200-250 A	1250-2500	103161	Ex9M2H TM AC250 4P4T	1/4

## 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- 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	125 A	100-125 A	625-1250	101329	Ex9M2P TM AC125 3P	1/4
3	160 A	128-160 A	800-1600	101330	Ex9M2P TM AC160 3P	1/4
3	180 A	144-180 A	900-1800	101331	Ex9M2P TM AC180 3P	1/4
3	200 A	160-200 A	1000-2000	101332	Ex9M2P TM AC200 3P	1/4
3	225 A	180-225 A	1125-2250	101333	Ex9M2P TM AC225 3P	1/4
3	250 A	200-250 A	1250-2500	101334	Ex9M2P TM AC250 3P	1/4
4	125 A	100-125 A	625-1250	103168	Ex9M2P TM AC125 4P4T	1/4
4	160 A	128-160 A	800-1600	103169	Ex9M2P TM AC160 4P4T	1/4
4	180 A	144-180 A	900-1800	103170	Ex9M2P TM AC180 4P4T	1/4
4	200 A	160-200 A	1000-2000	103171	Ex9M2P TM AC200 4P4T	1/4
4	225 A	180-225 A	1125-2250	103172	Ex9M2P TM AC225 4P4T	1/4
4	250 A	200-250 A	1250-2500	103173	Ex9M2P TM AC250 4P4T	1/4

# Moulded Case Circuit Breakers Ex9M3

## Version Ex9M3S up to 400 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	200-250 A	1250-2500	101454	Ex9M3S TM AC250 3P	1/2
3	315 A	252-315 A	1575-3150	101455	Ex9M3S TM AC315 3P	1/2
3	350 A	280-350 A	1750-3500	101456	Ex9M3S TM AC350 3P	1/2
3	400 A	320-400 A	2000-4000	101457	Ex9M3S TM AC400 3P	1/2
4	250 A	200-250 A	1250-2500	103174	Ex9M3S TM AC250 4P4T	1/2
4	315 A	252-315 A	1575-3150	103175	Ex9M3S TM AC315 4P4T	1/2
4	350 A	280-350 A	1750-3500	103176	Ex9M3S TM AC350 4P4T	1/2
4	400 A	320-400 A	2000-4000	103177	Ex9M3S TM AC400 4P4T	1/2

## Version Ex9M3N up to 400 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	200-250 A	1250-2500	101458	Ex9M3N TM AC250 3P	1/2
3	315 A	252-315 A	1575-3150	101459	Ex9M3N TM AC315 3P	1/2
3	350 A	280-350 A	1750-3500	101460	Ex9M3N TM AC350 3P	1/2
3	400 A	320-400 A	2000-4000	101461	Ex9M3N TM AC400 3P	1/2
4	250 A	200-250 A	1250-2500	103178	Ex9M3N TM AC250 4P4T	1/2
4	315 A	252-315 A	1575-3150	103179	Ex9M3N TM AC315 4P4T	1/2
4	350 A	280-350 A	1750-3500	103180	Ex9M3N TM AC350 4P4T	1/2
4	400 A	320-400 A	2000-4000	103181	Ex9M3N TM AC400 4P4T	1/2



# Moulded Case Circuit Breakers Ex9M3

## Version Ex9M3H up to 400 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	200-250 A	1250-2500	101470	Ex9M3H TM AC250 3P	1/2
3	315 A	252-315 A	1575-3150	101471	Ex9M3H TM AC315 3P	1/2
3	350 A	280-350 A	1750-3500	101472	Ex9M3H TM AC350 3P	1/2
3	400 A	320-400 A	2000-4000	101473	Ex9M3H TM AC400 3P	1/2
4	250 A	200-250 A	1250-2500	103190	Ex9M3H TM AC250 4P4T	1/2
4	315 A	252-315 A	1575-3150	103191	Ex9M3H TM AC315 4P4T	1/2
4	350 A	280-350 A	1750-3500	103192	Ex9M3H TM AC350 4P4T	1/2
4	400 A	320-400 A	2000-4000	103193	Ex9M3H TM AC400 4P4T	1/2

## Version Ex9M3P up to 400 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	200-250 A	1250-2500	101478	Ex9M3P TM AC250 3P	1/2
3	315 A	252-315 A	1575-3150	101479	Ex9M3P TM AC315 3P	1/2
3	350 A	280-350 A	1750-3500	101480	Ex9M3P TM AC350 3P	1/2
3	400 A	320-400 A	2000-4000	101481	Ex9M3P TM AC400 3P	1/2
4	250 A	200-250 A	1250-2500	103198	Ex9M3P TM AC250 4P4T	1/2
4	315 A	252-315 A	1575-3150	103199	Ex9M3P TM AC315 4P4T	1/2
4	350 A	280-350 A	1750-3500	103200	Ex9M3P TM AC350 4P4T	1/2
4	400 A	320-400 A	2000-4000	103201	Ex9M3P TM AC400 4P4T	1/2

# Moulded Case Circuit Breakers Ex9M4

## Version Ex9M4S 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	400 A	320-400 A	2000-4000	103373	Ex9M4S TM AC400 3P	1/1
3	500 A	400-500 A	2500-5000	103374	Ex9M4S TM AC500 3P	1/1
3	630 A	500-630 A	3150-6300	103375	Ex9M4S TM AC630 3P	1/1
4	400 A	320-400 A	2000-4000	103415	Ex9M4S TM AC400 4P4T	1/1
4	500 A	400-500 A	2500-5000	103416	Ex9M4S TM AC500 4P4T	1/1
4	630 A	500-630 A	3150-6300	103417	Ex9M4S TM AC630 4P4T	1/1

## Version Ex9M4N 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	400 A	320-400 A	2000-4000	103376	Ex9M4N TM AC400 3P	1/1
3	500 A	400-500 A	2500-5000	103377	Ex9M4N TM AC500 3P	1/1
3	630 A	500-630 A	3150-6300	103378	Ex9M4N TM AC630 3P	1/1
4	400 A	320-400 A	2000-4000	103418	Ex9M4N TM AC400 4P4T	1/1
4	500 A	400-500 A	2500-5000	103419	Ex9M4N TM AC500 4P4T	1/1
4	630 A	500-630 A	3150-6300	103420	Ex9M4N TM AC630 4P4T	1/1

# Moulded Case Circuit Breakers Ex9M4

## Version Ex9M4H 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	400 A	320-400 A	2000-4000	103385	Ex9M4H TM AC400 3P	1/1
3	500 A	400-500 A	2500-5000	103386	Ex9M4H TM AC500 3P	1/1
3	630 A	500-630 A	3150-6300	103387	Ex9M4H TM AC630 3P	1/1
4	400 A	320-400 A	2000-4000	103427	Ex9M4H TM AC400 4P4T	1/1
4	500 A	400-500 A	2500-5000	103428	Ex9M4H TM AC500 4P4T	1/1
4	630 A	500-630 A	3150-6300	103429	Ex9M4H TM AC630 4P4T	1/1

## Version Ex9M4P 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	400 A	320-400 A	2000-4000	103391	Ex9M4P TM AC400 3P	1/1
3	500 A	400-500 A	2500-5000	103392	Ex9M4P TM AC500 3P	1/1
3	630 A	500-630 A	3150-6300	103393	Ex9M4P TM AC630 3P	1/1
4	400 A	320-400 A	2000-4000	103433	Ex9M4P TM AC400 4P4T	1/1
4	500 A	400-500 A	2500-5000	103434	Ex9M4P TM AC500 4P4T	1/1
4	630 A	500-630 A	3150-6300	103435	Ex9M4P TM AC630 4P4T	1/1

# Moulded Case Circuit Breakers Ex9M5

## Version Ex9M5S up to 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	500-630 A	3150-6300	103394	Ex9M5S TM AC630 3P	1/1
3	700 A	560-700 A	3500-7000	103395	Ex9M5S TM AC700 3P	1/1
3	800 A	640-800 A	4000-8000	103396	Ex9M5S TM AC800 3P	1/1
4	630 A	500-630 A	3150-6300	103436	Ex9M5S TM AC630 4P4T	1/1
4	700 A	560-700 A	3500-7000	103437	Ex9M5S TM AC700 4P4T	1/1
4	800 A	640-800 A	4000-8000	103438	Ex9M5S TM AC800 4P4T	1/1

## Version Ex9M5N up to 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	500-630 A	3150-6300	103397	Ex9M5N TM AC630 3P	1/1
3	700 A	560-700 A	3500-7000	103398	Ex9M5N TM AC700 3P	1/1
3	800 A	640-800 A	4000-8000	103399	Ex9M5N TM AC800 3P	1/1
4	630 A	500-630 A	3150-6300	103439	Ex9M5N TM AC630 4P4T	1/1
4	700 A	560-700 A	3500-7000	103440	Ex9M5N TM AC700 4P4T	1/1
4	800 A	640-800 A	4000-8000	103441	Ex9M5N TM AC800 4P4T	1/1

# Moulded Case Circuit Breakers Ex9M5

## Version Ex9M5H up to 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	500-630 A	3150-6300	103406	Ex9M5H TM AC630 3P	1/1
3	700 A	560-700 A	3500-7000	103407	Ex9M5H TM AC700 3P	1/1
3	800 A	640-800 A	4000-8000	103408	Ex9M5H TM AC800 3P	1/1
4	630 A	500-630 A	3150-6300	103448	Ex9M5H TM AC630 4P4T	1/1
4	700 A	560-700 A	3500-7000	103449	Ex9M5H TM AC700 4P4T	1/1
4	800 A	640-800 A	4000-8000	103450	Ex9M5H TM AC800 4P4T	1/1

## Version Ex9M5P up to 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 steps  $(0.8-0.9-1.0) \times I_n$
- $I_i$  variable  $(5-6-7-8-9-10) \times I_n$
- Mounting screws and 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	500-630 A	3150-6300	103412	Ex9M5P TM AC630 3P	1/1
3	700 A	560-700 A	3500-7000	103413	Ex9M5P TM AC700 3P	1/1
3	800 A	640-800 A	4000-8000	103414	Ex9M5P TM AC800 3P	1/1
4	630 A	500-630 A	3150-6300	103454	Ex9M5P TM AC630 4P4T	1/1
4	700 A	560-700 A	3500-7000	103455	Ex9M5P TM AC700 4P4T	1/1
4	800 A	640-800 A	4000-8000	103456	Ex9M5P TM AC800 4P4T	1/1

# Technical Data Ex9M1

## Moulded Case Circuit Breakers up to 125 A

### General parameters

Suitable for household as well as industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release fixed  $10 \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 21	106317
Shunt trip releases	SHT21	101397-101405
Undervoltage releases	UVT21	101406-101407

Max. number of installed internal accessories is 2 pcs of AX21, 1 pc of AL21 or EC 21 and 1 pc of a release (SHT21 or UVT21)

External accessories

Direct rotary handle	RHD21	101410
Extended rotary handle	ERH21	101409
Remote motor operators	MOD21	101411-101415
Terminal cover, short	TCV21 3P, 4P	101439, 102372
Terminal cover, long	TCE21 3P, 4P	101440, 102373
Phase barrier set	PB21 3P, 4P	101441, 104852
Connection terminals	MC21	103705-103708
DIN-rail adaptor	DRA21	106319

Mounting screws, box terminals as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M1S	Ex9M1N	Ex9M1H	Ex9M1P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 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 5 kA / 690 V	50 kA / 415 V 5 kA / 690 V	100 kA / 415 V 6 kA / 690 V	150 kA / 415 V 8 kA / 690 V
Rated service short-circuit breaking capacity $I_{cs}$	36 kA / 415 V 5 kA / 690 V	50 kA / 415 V 5 kA / 690 V	100 kA / 415 V 6 kA / 690 V	150 kA / 415 V 8 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 7.5 kA / 690 V	105 kA / 415 V 7.5 kA / 690 V	220 kA / 415 V 9 kA / 690 V	330 kA / 415 V 13.6 kA / 690 V
Rated current	16 — 125 A			
Overvoltage category	III / 3			
Utilization category	A			
Mechanical service life	15 000 operation cycles			
Electrical service life	5 000 operation cycles			
Maximum frequency of switch. cycles	120 operating cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 125 A	0.80 mΩ			
Power loss per pole at 125 A	12.5 W			
Line voltage connection	arbitrary above or below			

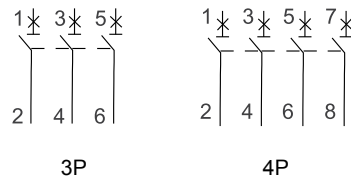
# Technical Data Ex9M1

## Moulded Case Circuit Breakers up to 125 A

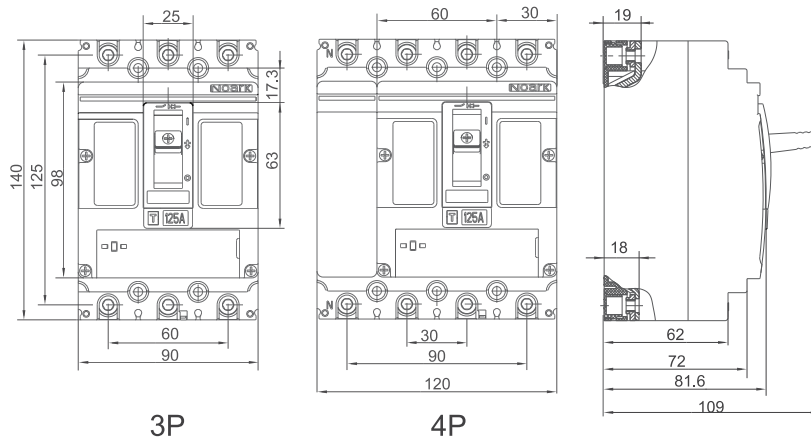
### Mechanical parameters

Device width 3P / 4P	90 mm / 120 mm
Device height	140 mm
Device depth	81.6 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	box
Terminal capacity	4 — 95 mm <sup>2</sup>
Fastening torque of terminals	8 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	1.2 kg / 1.7 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



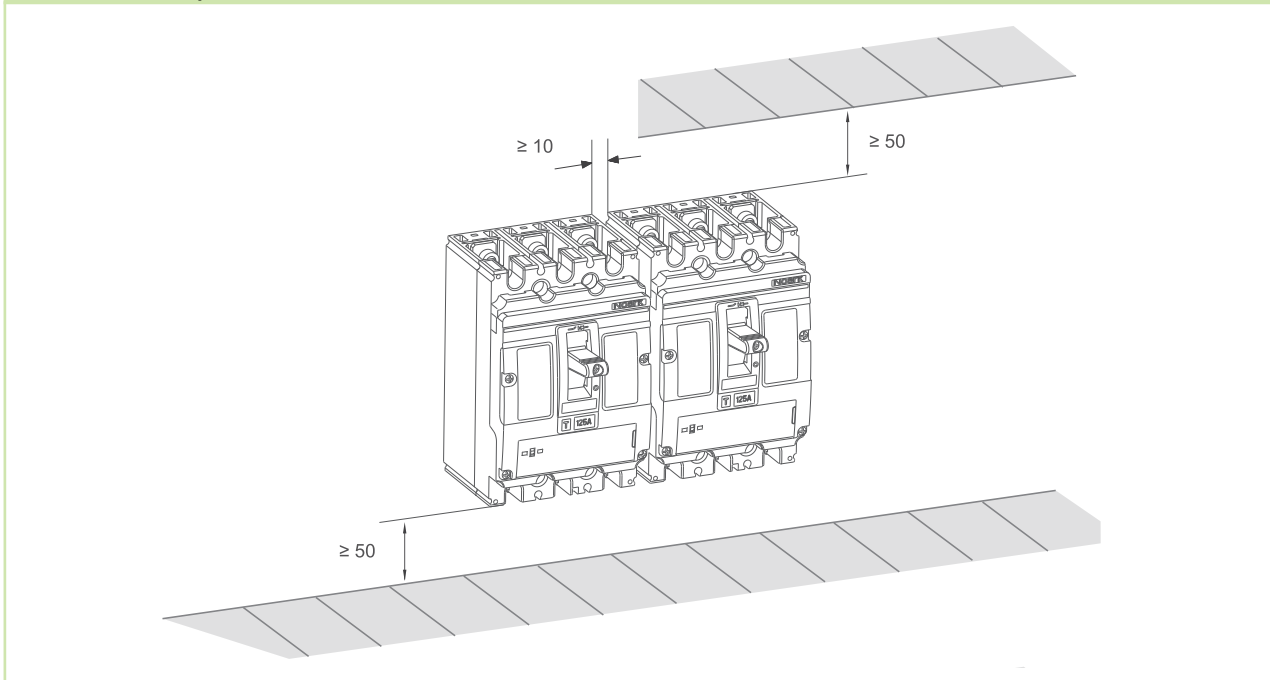
### Dimensions



# Technical Data Ex9M1

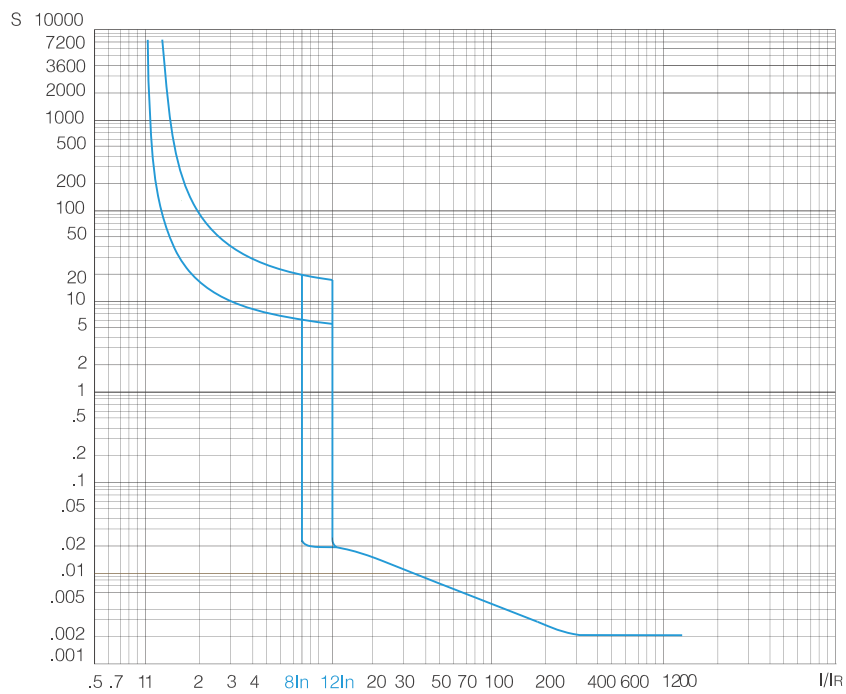
## Moulded Case Circuit Breakers up to 125 A

### Installation space



### Tripping characteristics

Ex9M1 TM AC





# Technical Data Ex9M2

## Moulded Case Circuit Breakers up to 250 A

### General parameters

Suitable for household as well as industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release  $(5-6-7-8-9-10) \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 21	106317
Shunt trip releases	SHT22	101416-101424
Undervoltage releases	UVT22	101425-101426

Max. number of installed internal accessories is 2 pcs of AX21, 1 pc of AL21 or EC 21 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 set	PB22 3P, 4P	101444, 104853
Connection terminals	MC22	103709-103714
DIN-rail adaptor	DRA22	106320

Mounting screws, box terminals as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M2S	Ex9M2N	Ex9M2H	Ex9M2P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 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 6 kA / 690 V	100 kA / 415 V 8 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 6 kA / 690 V	100 kA / 415 V 8 kA / 690 V	150 kA / 415 V 10 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 7.5 kA / 690 V	105 kA / 415 V 7.5 kA / 690 V	220 kA / 415 V 9 kA / 690 V	330 kA / 415 V 13.6 kA / 690 V
Rated current	125 — 250 A			
Overvoltage category	III / 3			
Utilization category	A			
Mechanical service life	15 000 operation cycles			
Electrical service life	5 000 operation cycles			
Maximum frequency of switch. cycles	120 operating cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 250 A	0.40 mΩ			
Power loss per pole at 250 A	25 W			
Line voltage connection	arbitrary above or below			

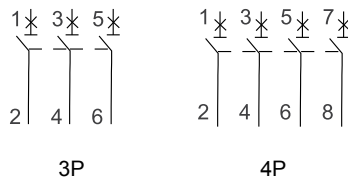
# Technical Data Ex9M2

## Moulded Case Circuit Breakers up to 250 A

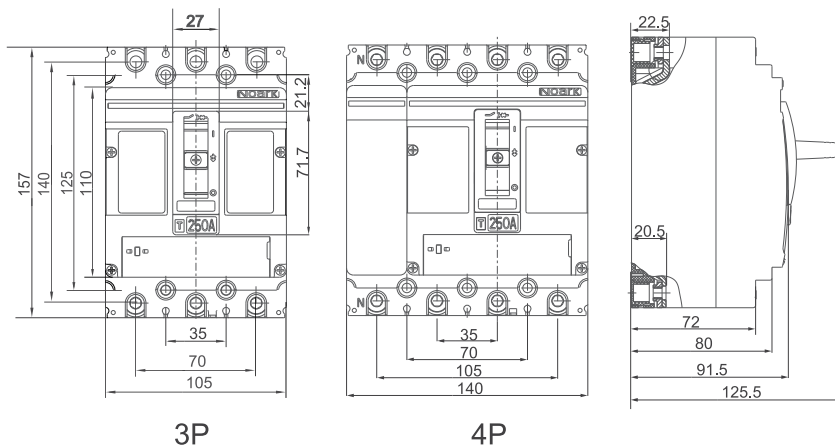
### Mechanical parameters

Device width 3P / 4P	105 mm / 140 mm
Device height	157 mm
Device depth	91.5 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	box
Terminal capacity	10 — 120 mm <sup>2</sup>
Fastening torque of terminals	25 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	1.7 kg / 2.2 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



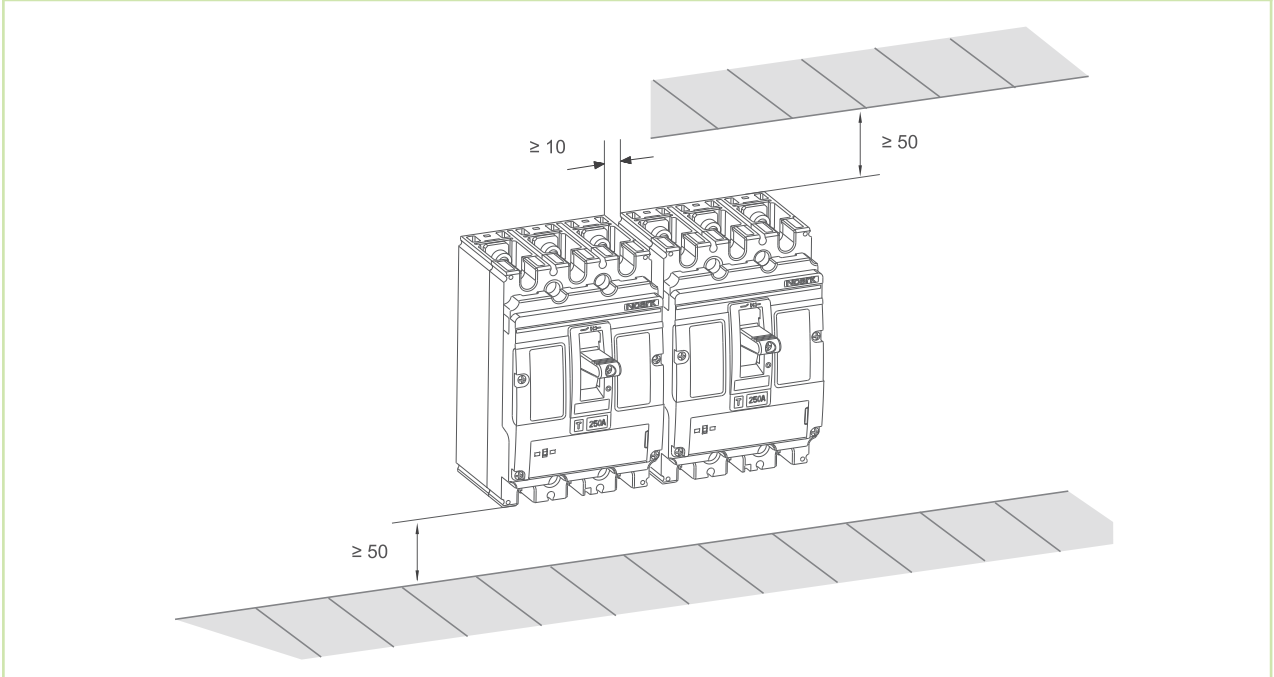
### Dimensions



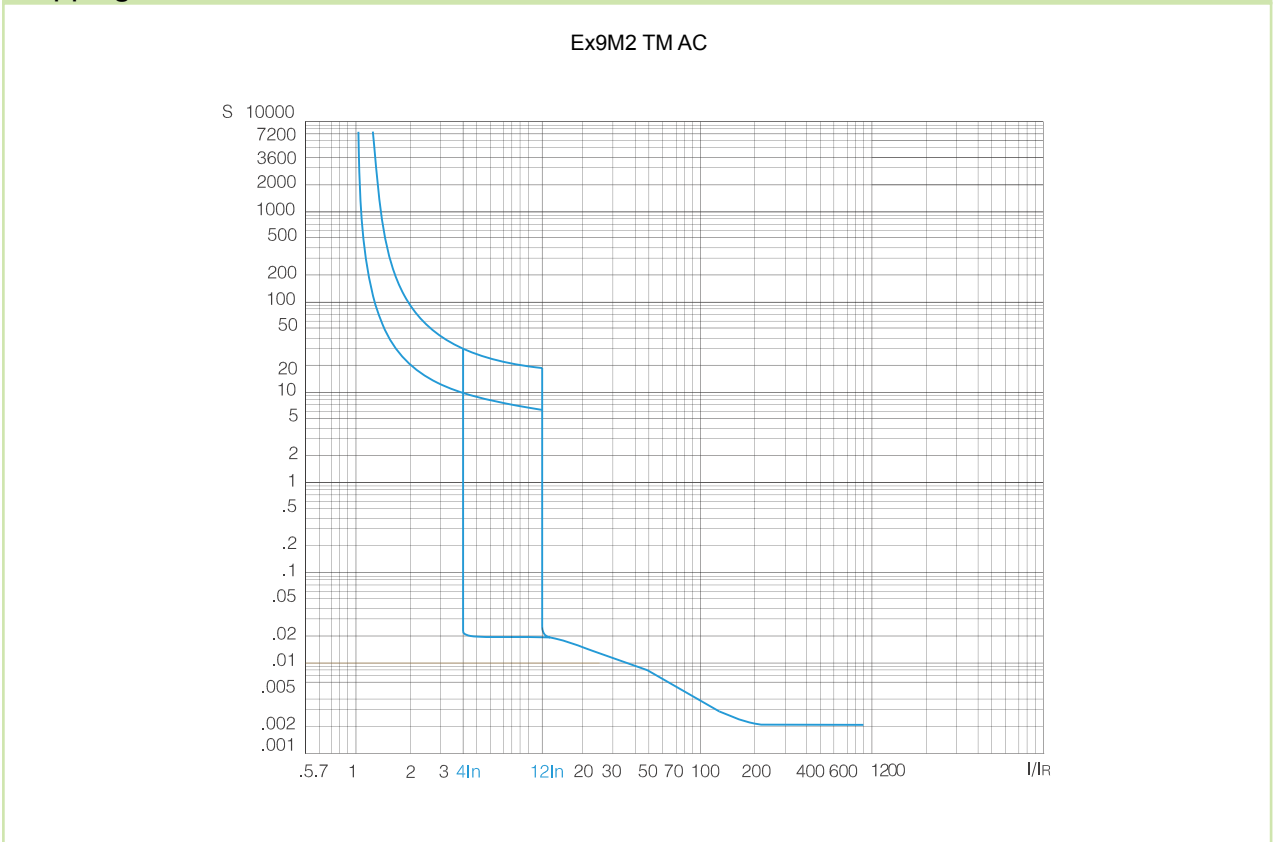
# Technical Data Ex9M2

## Moulded Case Circuit Breakers up to 250 A

### Installation space



### Tripping characteristics



# Technical Data Ex9M3

## Moulded Case Circuit Breakers up to 400 A

### General parameters

Suitable for household as well as industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release  $(5-6-7-8-9-10) \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 23	106317
Shunt trip releases	SHT22	101416-101424
Undervoltage releases	UVT22	101425-101426

Max. number of installed internal accessories is 3 pcs of AX21, 1 pc of AL21 or EC 23 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 set	PB23 3P, 4P	101491, 104854
Connection terminals	MC23	103715-103722

Mounting screws as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M3S	Ex9M3N	Ex9M3H	Ex9M3P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 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 6 kA / 690 V	100 kA / 415 V 8 kA / 690 V	150 kA / 415 V 10 kA / 690 V
Rated service short-circuit breaking capacity $I_{cs}$	36 kA / 415 V 3 kA / 690 V	50 kA / 415 V 3 kA / 690 V	100 kA / 415 V 4 kA / 690 V	150 kA / 415 V 5 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 7.5 kA / 690 V	105 kA / 415 V 7.5 kA / 690 V	220 kA / 415 V 9 kA / 690 V	330 kA / 415 V 13.6 kA / 690 V
Rated current	250 — 400 A			
Overvoltage category	III			
Utilization category	A			
Mechanical service life	10 000 operation cycles			
Electrical service life	2 000 operation cycles			
Maximum frequency of switch. cycles	60 cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 400 A	0.15 mΩ			
Power loss per pole at 400 A	24 W			
Line voltage connection	arbitrary above or below			

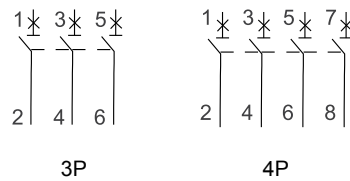
# Technical Data Ex9M3

## Moulded Case Circuit Breakers up to 400 A

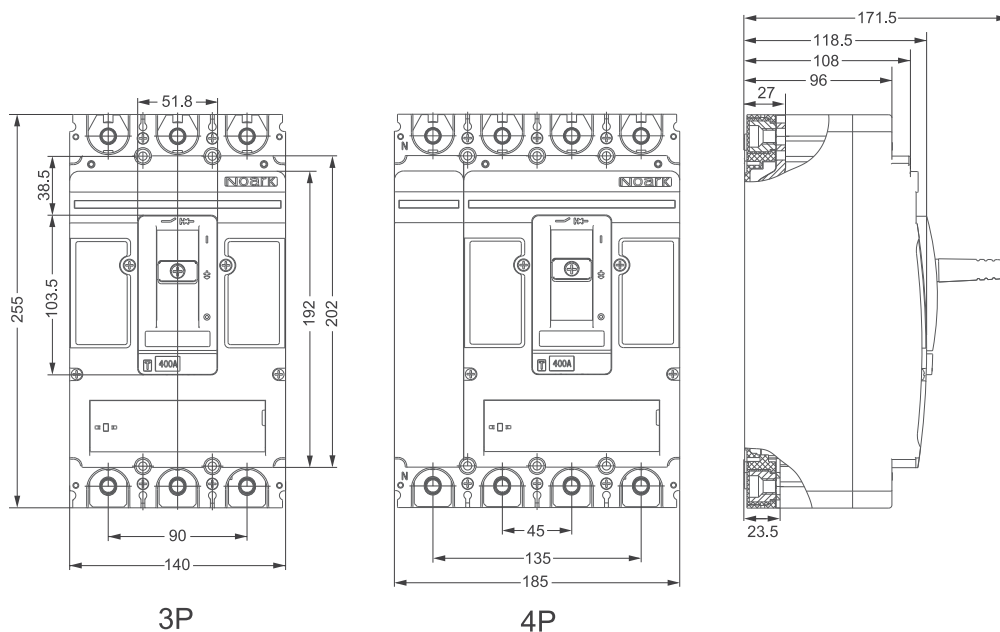
### Mechanical parameters

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 — 30 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	5 kg / 6.6 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



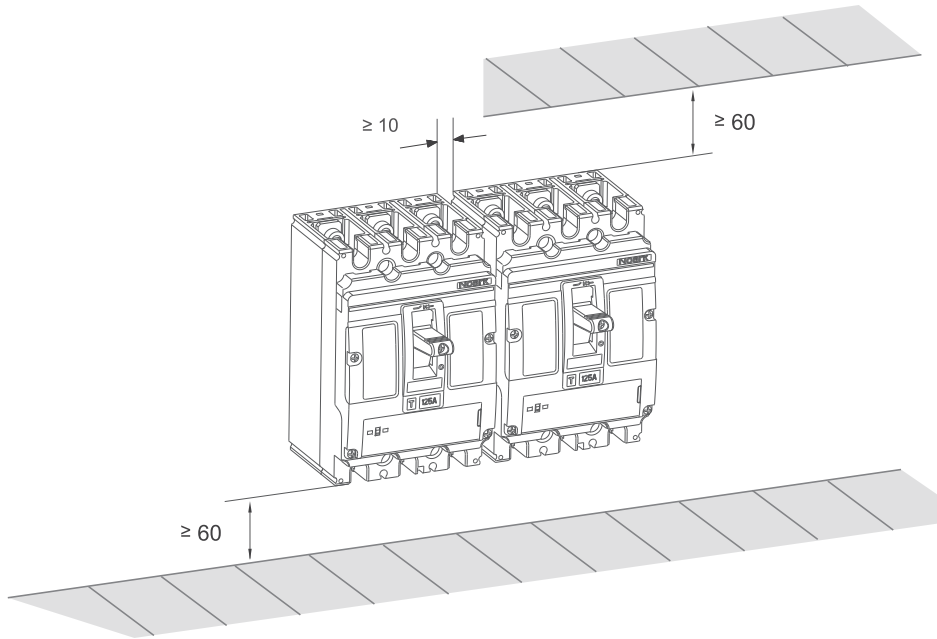
### Dimensions



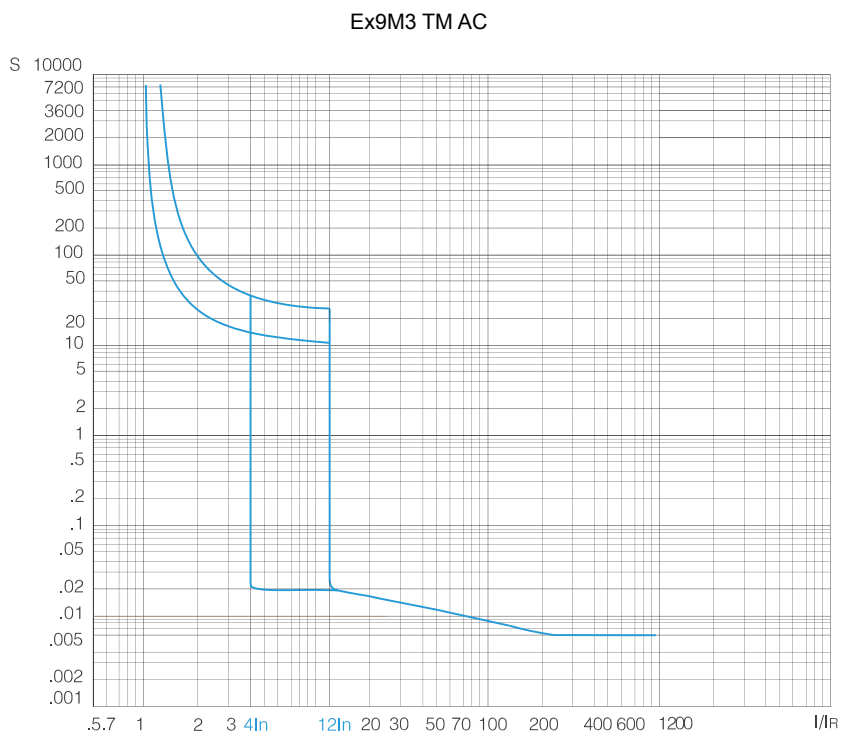
# Technical Data Ex9M3

## Moulded Case Circuit Breakers up to 400 A

### Installation space



### Tripping characteristics



# Technical Data Ex9M4

## Moulded Case Circuit Breakers up to 630 A

### General parameters

Suitable for industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release  $(5-6-7-8-9-10) \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 23	106317
Shunt trip releases	SHT24	103723-103730
Undervoltage releases	UVT24	103722-103740

Max. number of installed internal accessories is 4 pcs of AX21, 1 pc of AL21 or EC 23 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 set	PB24 3P, 4P	103751, 104856
Connection terminals	MC24	106314

Mounting screws as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M4S	Ex9M4N	Ex9M4H	Ex9M4P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 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 10 kA / 690 V	50 kA / 415 V 10 kA / 690 V	100 kA / 415 V 12 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated service short-circuit breaking capacity $I_{cs}$	36 kA / 415 V 5 kA / 690 V	50 kA / 415 V 5 kA / 690 V	100 kA / 415 V 6 kA / 690 V	150 kA / 415 V 7.5 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 17 kA / 690 V	105 kA / 415 V 17 kA / 690 V	220 kA / 415 V 24 kA / 690 V	330 kA / 415 V 30 kA / 690 V
Rated current	400 — 630 A			
Overvoltage category	III			
Utilization category	A			
Mechanical service life	10 000 operation cycles			
Electrical service life	2 000 operation cycles			
Maximum frequency of switch. cycles	60 cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 630 A	0.08 mΩ			
Power loss per pole at 630 A	31.8 W			
Line voltage connection	arbitrary above or below			

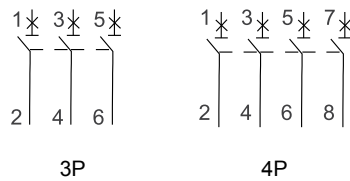
# Technical Data Ex9M4

## Moulded Case Circuit Breakers up to 630 A

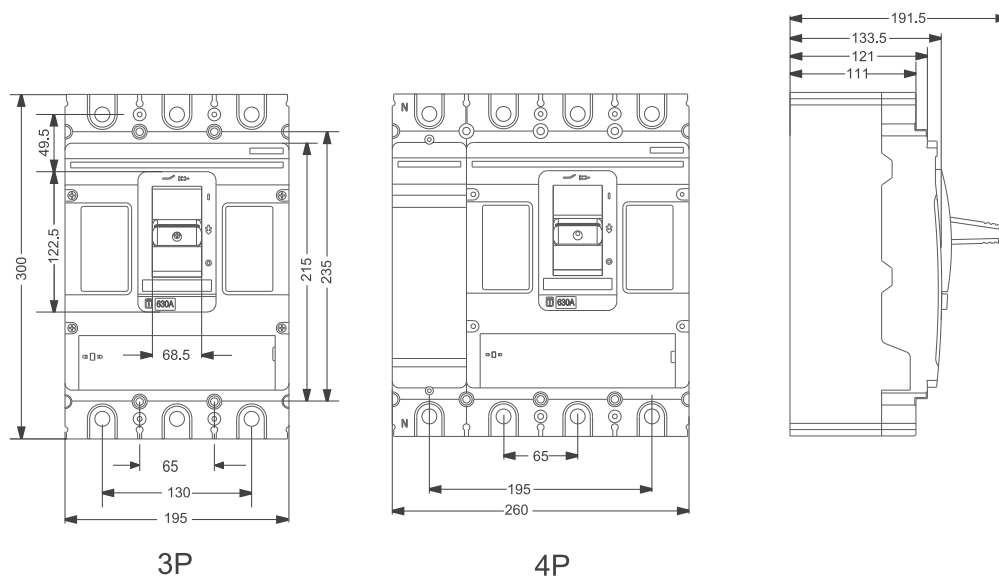
### Mechanical parameters

Device width 3P / 4P	196 / 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	25 — 30 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	10.2 kg / 13.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



### Dimensions

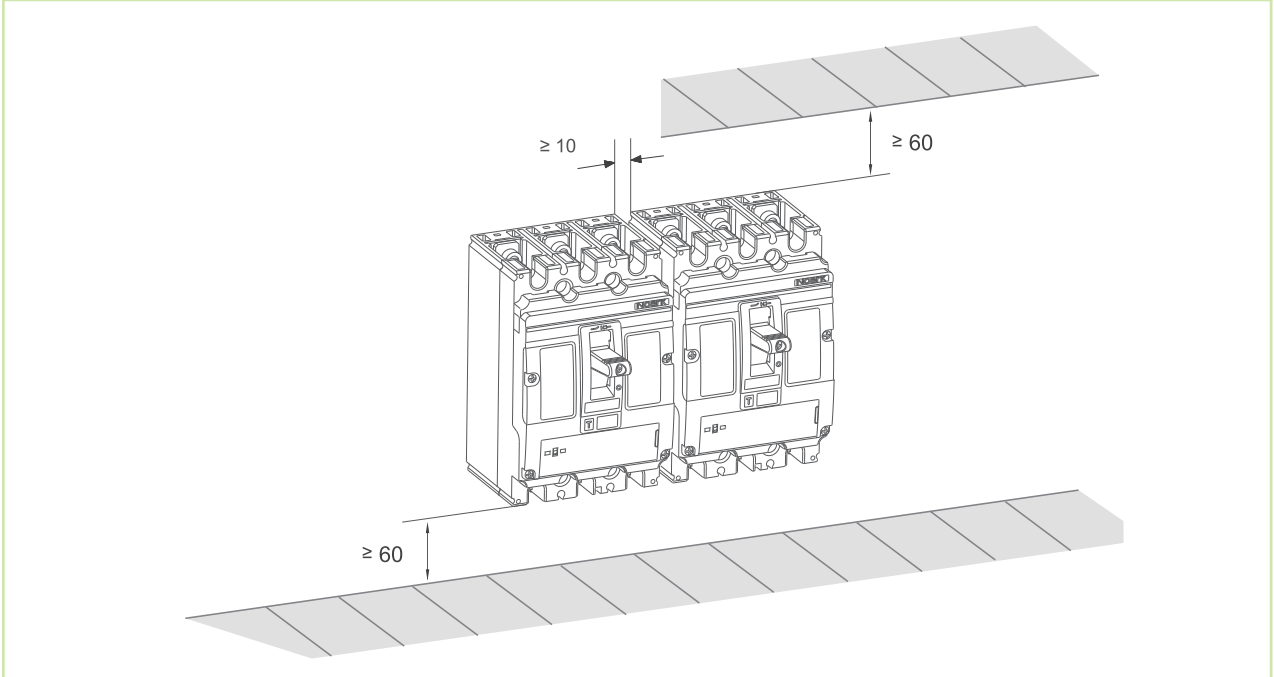




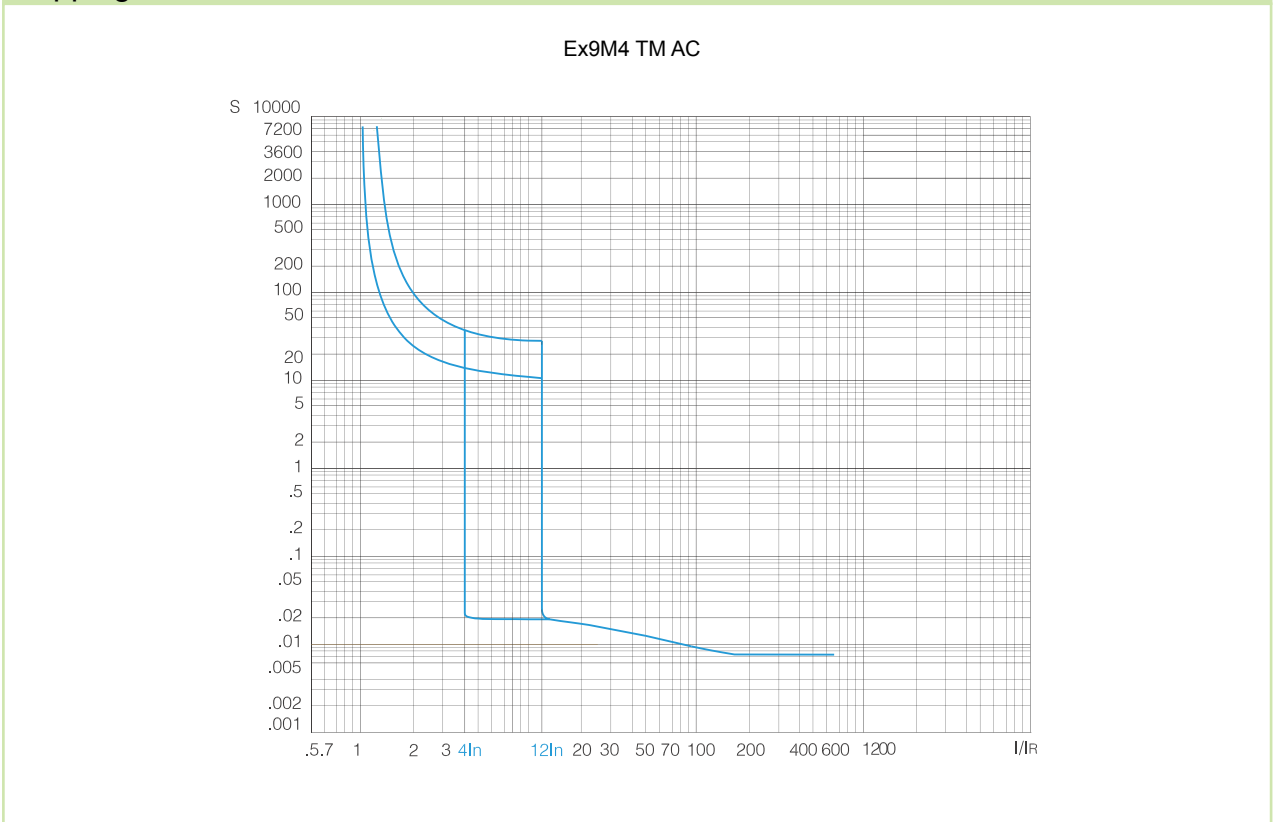
# Technical Data Ex9M4

## Moulded Case Circuit Breakers up to 630 A

### Installation space



### Tripping characteristics



# Technical Data Ex9M5

## Moulded Case Circuit Breakers up to 800 A

### General parameters

Suitable for industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release  $(5-6-7-8-9-10) \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 23	106317
Shunt trip releases	SHT24	103723-103730
Undervoltage releases	UVT24	103722-103740

Max. number of installed internal accessories is 4 pcs of AX21, 1 pc of AL21 or EC 23 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 set	PB24 3P, 4P	103751, 104856
Connection terminals	MC24	106314

Mounting screws as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M5S	Ex9M5N	Ex9M5H	Ex9M5P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 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 10 kA / 690 V	50 kA / 415 V 10 kA / 690 V	100 kA / 415 V 12 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated service short-circuit breaking capacity $I_{cs}$	36 kA / 415 V 5 kA / 690 V	50 kA / 415 V 5 kA / 690 V	100 kA / 415 V 6 kA / 690 V	150 kA / 415 V 7.5 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 17 kA / 690 V	105 kA / 415 V 17 kA / 690 V	220 kA / 415 V 24 kA / 690 V	330 kA / 415 V 30 kA / 690 V
Rated current	630 — 800 A			
Overvoltage category	III			
Utilization category	A			
Mechanical service life	10 000 operation cycles			
Electrical service life	2 000 operation cycles			
Maximum frequency of switch. cycles	60 cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 800 A	0.08 mΩ			
Power loss per pole at 800 A	51.2 W			
Line voltage connection	arbitrary above or below			

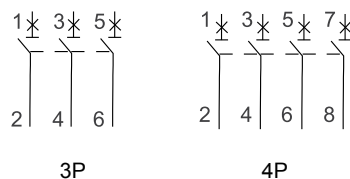
# Technical Data Ex9M5

## Moulded Case Circuit Breakers up to 800 A

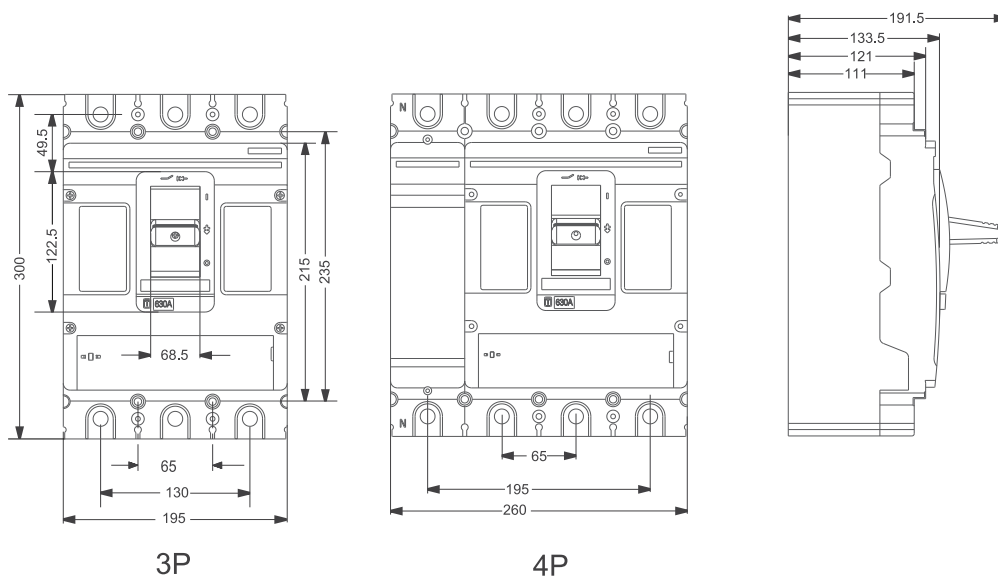
### Mechanical parameters

Device width 3P / 4P	196 / 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	25 — 30 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	10.2 kg / 13.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



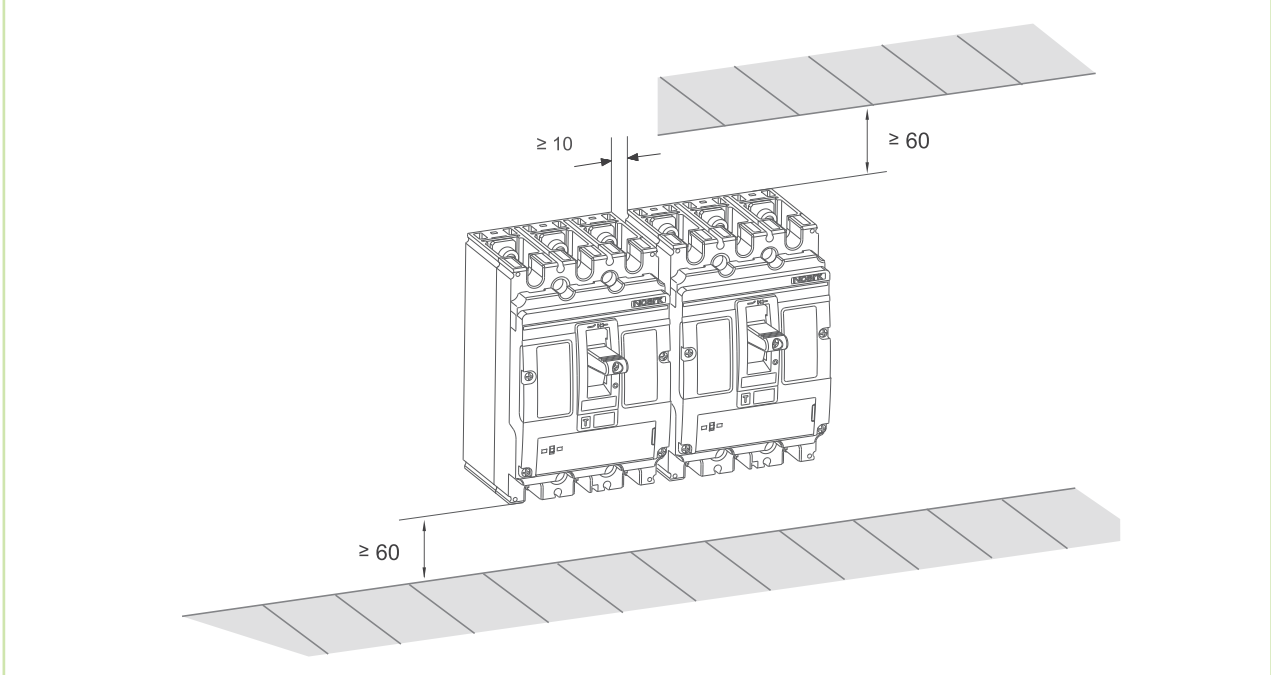
### Dimensions



# Technical Data Ex9M5

## Moulded Case Circuit Breakers up to 800 A

### Installation space



### Tripping characteristics

