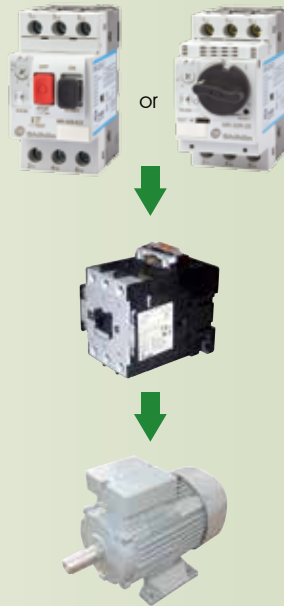
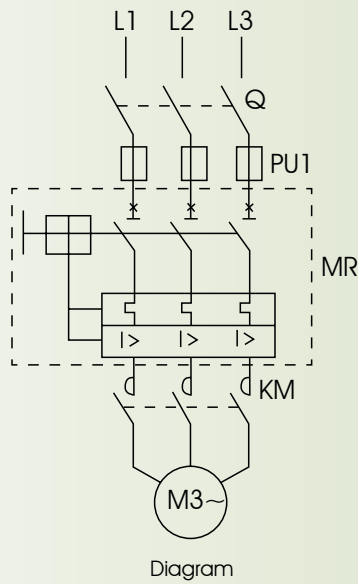


MANUAL MOTOR STARTER



Function

- ◆ Phase-failure protection
- ◆ Short circuit protection
- ◆ Overload protection
- ◆ Frequent operation
- ◆ Disconnect switch



Feature



- ◆ Standard: IEC 60947-2
IEC 60947-4
- ◆ 50% Less wiring: MCCB+Contactor+TOR → MMS+Contactor
- ◆ Compact size: save 57% space
- ◆ Green design: Recyclable plastic, no cadmium connection, RoHs
- ◆ Tool free installation: 35mm Din-rail mounting

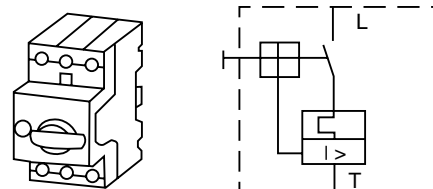
Type designation



Environment condition

- ◆ Storage temp: -25°C ~ 55°C
- ◆ Operation temp: -5°C ~ 40°C
- ◆ Maximum operation altitude: 2000M

The main technical parameters



3 Phase AC Motor	Rated Operation Current	Thermal Adjustment Range	Magnetic operating current (A)	Model	
				Toggle	Rotary
400V (kW)	In (A)	In (A)	Id ±20% (A)		
-	0.16	0.1-0.16	1.92	MR-32S-0.16	MR-32R-0.16
-	0.25	0.16-0.25	3	MR-32S-0.25	MR-32R-0.25
-	0.4	0.25-0.4	4.8	MR-32S-0.4	MR-32R-0.4
-	0.63	0.4-0.63	7.56	MR-32S-0.63	MR-32R-0.63
-	1	0.63-1	12	MR-32S-1	MR-32R-1
0.37	1.6	1-1.6	19.2	MR-32S-1.6	MR-32R-1.6
0.75	2.5	1.6-2.5	30	MR-32S-2.5	MR-32R-2.5
1.5	4	2.5-4	48	MR-32S-4	MR-32R-4
2.2	6.3	4-6.3	75.6	MR-32S-6.3	MR-32R-6.3
4	10	6-10	120	MR-32S-10	MR-32R-10
5.5	14	9-14	168	MR-32S-14	MR-32R-14
7.5	18	13-18	216	MR-32S-18	MR-32R-18
11	23	17-23	276	MR-32S-23	MR-32R-23
11	25	20-25	300	MR-32S-25	MR-32R-25
15	32	24-32	384	MR-32S-32	MR-32R-32

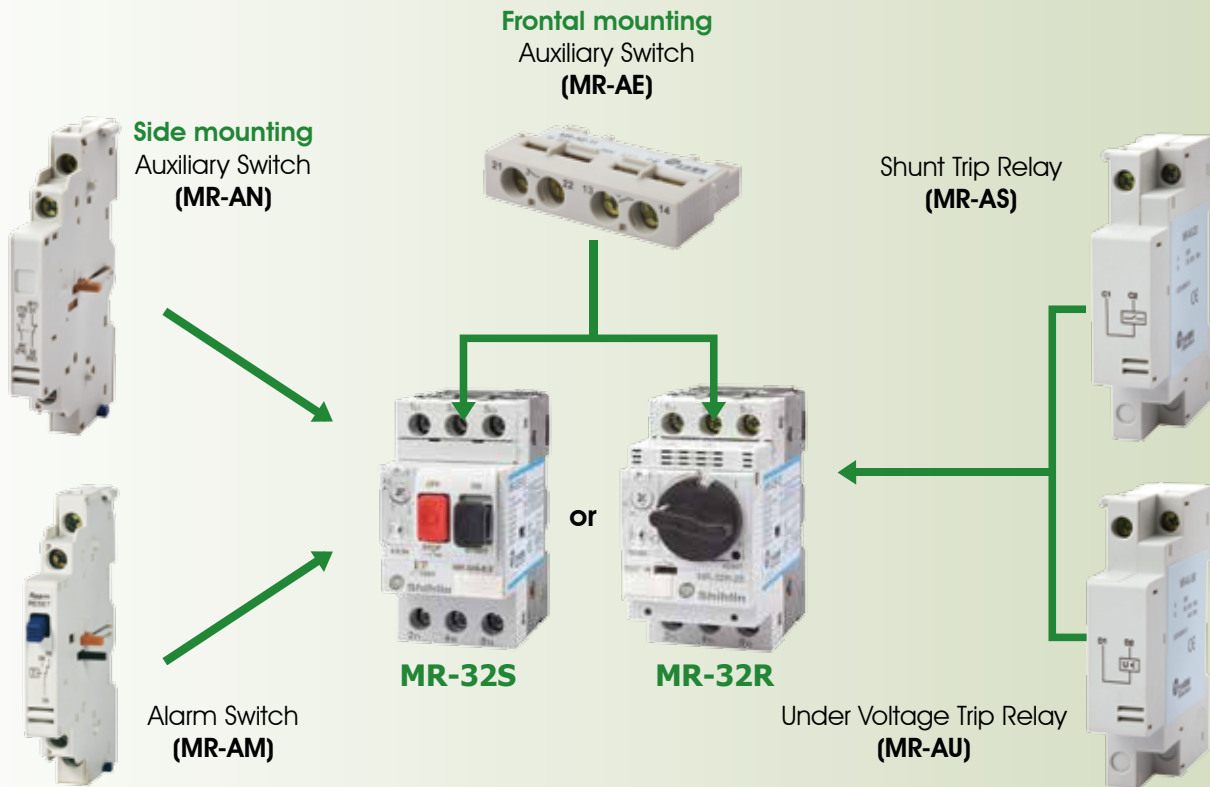
Note: Rotary type motor protection circuit breaker will be launched in the near future.

Rated breaking capacity (kAIC)

- ◆ In: Rated current (A)
- ◆ Icu: Rated ultimate short-circuit breaking capacity
- ◆ Ics: Rated service short-circuit breaking capacity
- ◆ Standard: IEC/ EN 60947-2

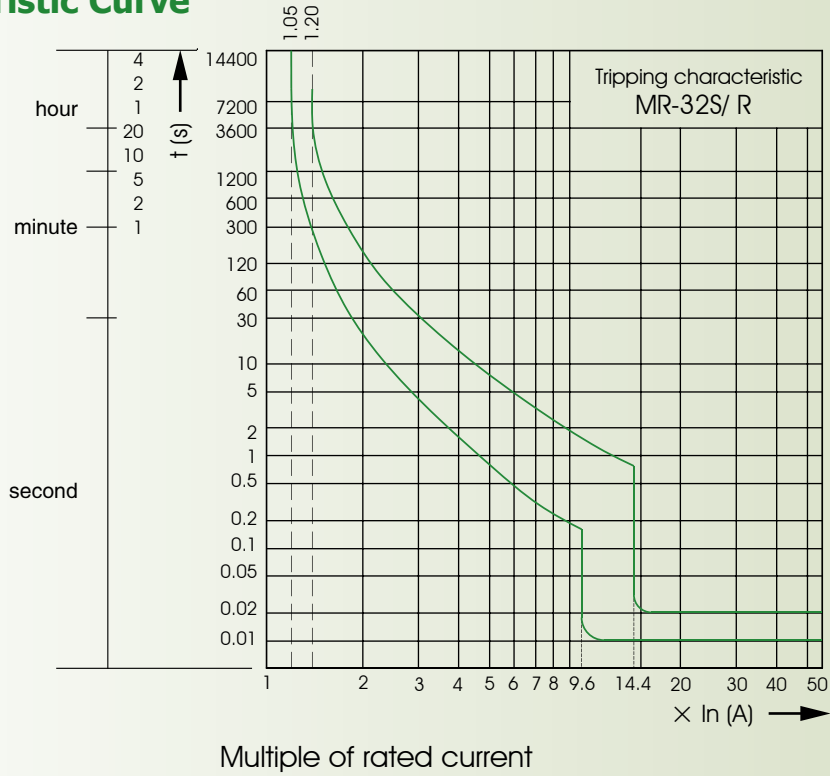
In A	230/240V		400/415V		440V		500V		690V	
	Icu kA	Ics kA	Icu kA	Ics kA	Icu kA	Ics kA	Icu kA	Ics kA	Icu kA	Ics kA
0.16	100	100	100	100	100	100	80	80	80	80
0.25	100	100	100	100	100	100	80	80	80	80
0.4	100	100	100	100	100	100	80	80	80	80
0.63	100	100	100	100	100	100	80	80	80	80
1	100	100	100	100	100	100	80	80	80	80
1.6	100	100	100	100	100	100	80	80	80	80
2.5	100	100	100	100	100	100	80	80	3	2.25
4	100	100	100	100	100	100	80	80	3	2.25
6.3	100	100	100	100	50	50	50	50	3	2.25
10	100	100	100	100	15	15	10	10	3	2.25
14	100	100	15	7.5	8	4	6	4.5	3	2.25
18	100	100	15	7.5	8	4	6	4.5	3	2.25
23	50	50	15	6	6	3	4	3	3	2.25
25	50	50	15	6	6	3	4	3	3	2.25
32	50	50	10	5	6	3	4	3	3	2.25

Accessories

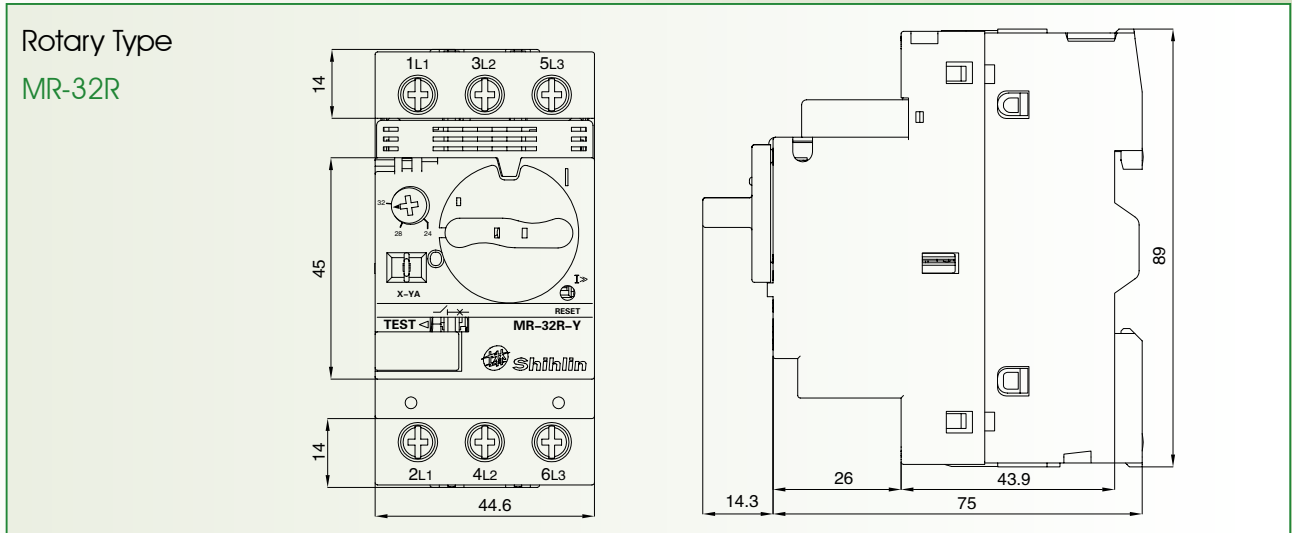
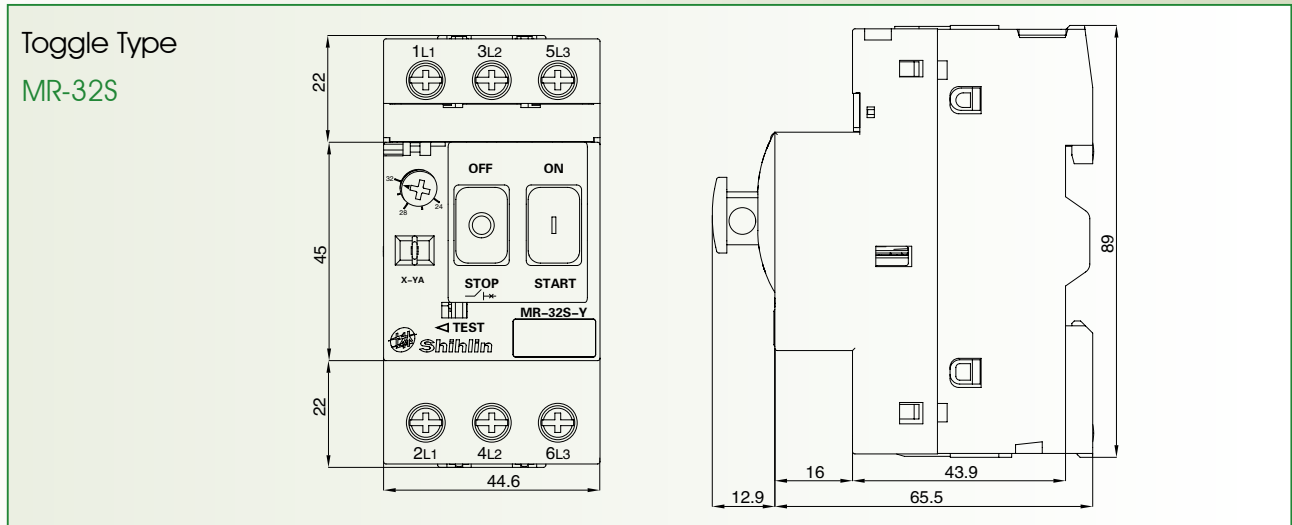


Accessory	Model	Contact	Specifications			
			U _i (AC/V)	U _e (V)	I _e (A)	VA
Alarm Switch 	MR-AM11	1NO 1NC	690	24	1.5	36
				48	1	48
				110/127	0.5	72
				230/240	0.3	72
Auxiliary Switch Front mounting 	MR-AE-11/20	1NO 1NC 2NO	250	24	2	48
				48	1.25	60
				110/127	1	120
				230/240	0.5	120
Auxiliary Switch Side mounting 	MR-AN-11/20	1NO 1NC 2NO	690	48	6	300
				110/127	4.5	500
				230/240	3.3	720
				380/415	2.2	850
				440	1.5	650
				500	1	500
				690	0.6	400
			U_i (AC/V)	U_c / Hz		
Shunt Trip Relay 	MR-AS	N/A	690	110-115V@50/60Hz		
				220-240V@50/60Hz		
				380-400V@50Hz 440V@60Hz		
Under Voltage Trip Relay 	MR-AU	N/A	690	110-115V@50/60Hz		
				220-240V@50/60Hz		
				380-400V@50Hz 440V@60Hz		

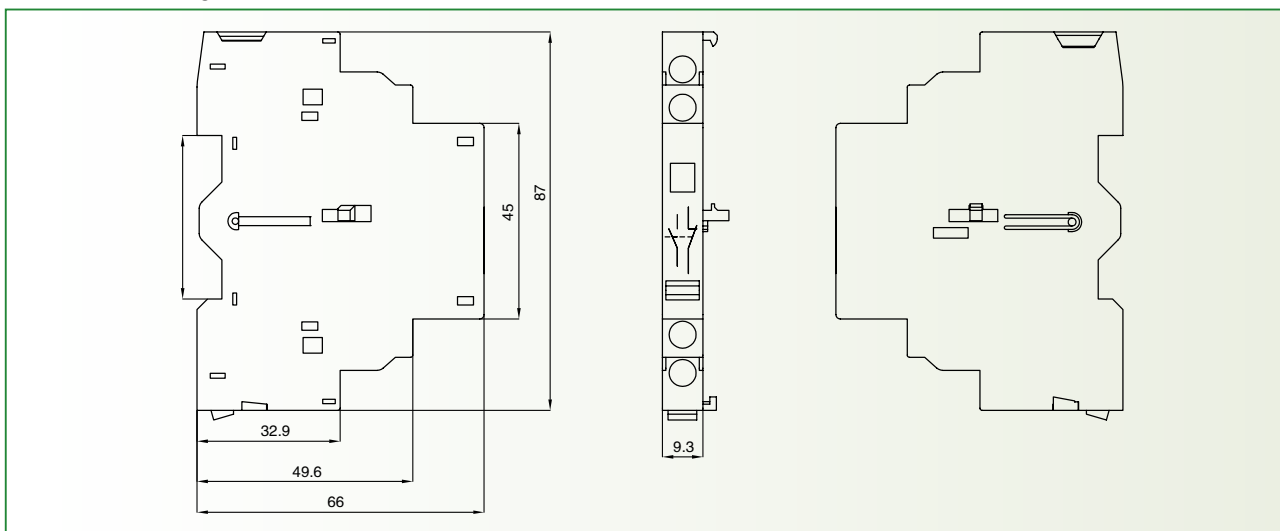
Characteristic Curve



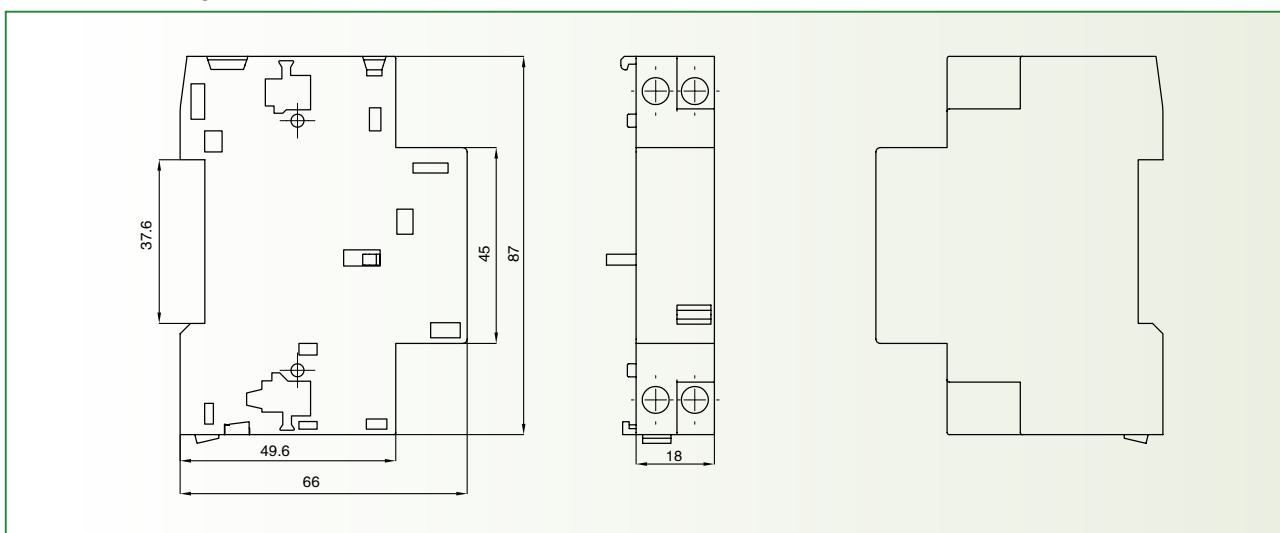
Dimension



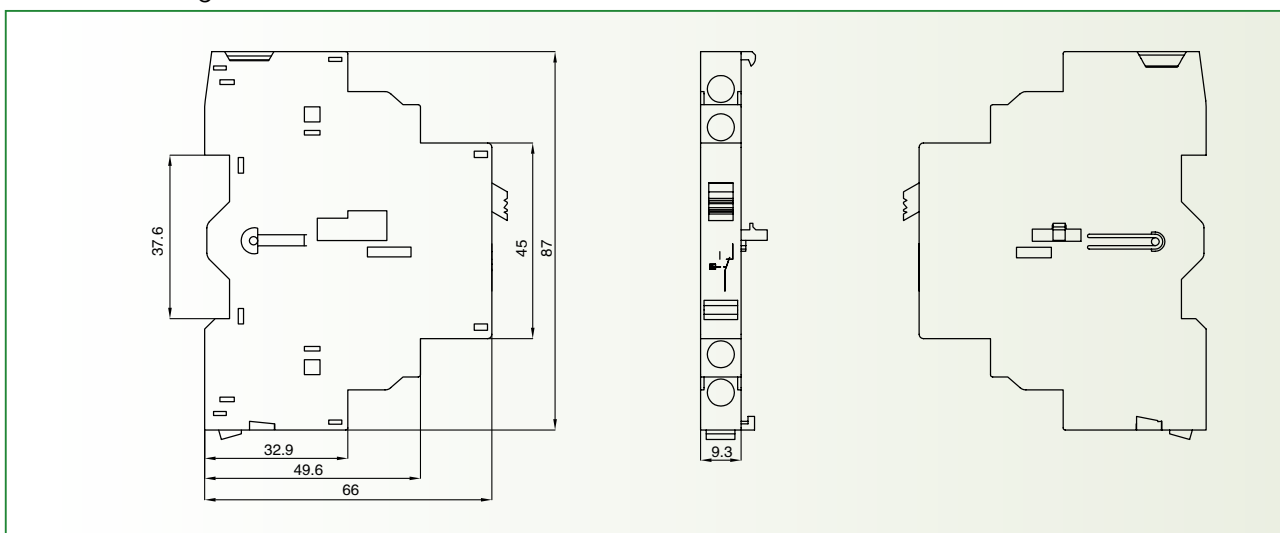
◆ Side mounting: Auxiliary Switch



◆ Side mounting: Shunt Trip/ UVT



◆ Side mounting: Alarm Switch



SHIHLIN ELECTRIC & ENGINEERING

MOTOR CONTROL (CONTACTOR/ MS/ MMS), CIRCUIT BREAKER (MCCB/ ELCB/ EMCCB/ MCB), AIR CIRCUIT BREAKER, AUTOMATIC TRANSFER SWITCHES (Panel Board Type/ Residential Unit Use), SURGE PROTECTIVE DEVICE, LOW VOLTAGE POWER CAPACITORS, SMART METER, INVERTER

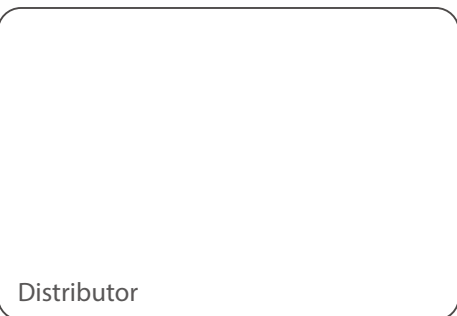


Breaker & switchgears overseas sales dept.

3F, No.9, Sec. 1, Chang-an E. Rd., Zhongshan Dist., Taipei City 10441, Taiwan
T. +886-2-2541-9822 F. +886-2-2581-2665
e-mail. b.export@seec.com.tw
<http://circuit-breaker.seec.com.tw>

Headquarters

16F, No.88, Sec. 6, Zhongshan N. Rd., Shilin Dist., Taipei City 11155, Taiwan
T. +886-2-2834-2662 F. +886-2-2836-6187
<http://www.seec.com.tw>



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