

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

General data



Size S0 motor starter protector

3RV1 motor starter protectors/circuit breakers are compact, current limiting motor starter protectors/circuit breakers which are optimized for load feeders. The motor starter protectors/circuit breakers are used according to IEC for switching and protecting three-phase motors of up to 45 kW at 400 V AC and for other loads with rated currents of up to 100 A.

The 3RV1 motor starter protectors/circuit breakers are generally approved according to IEC and UL/CSA.

According to UL 508 the 3RV1 motor starter protectors/circuit breakers in sizes S00 to S3 are approved as

- "Manual Motor Controllers"
- "Manual Motor Controllers" for "Group Installations"
- "Manual Motor Controllers Suitable for Tab Conductor Protection in Group Installations"
- "Self-Protected Combination Motor Controller (Type E)"
This approval does not apply to size S00. Furthermore, the 3RV10 motor starter protectors in sizes S0 and S3 must be equipped with additional infeed terminals.

For 3RV2 motor starter protectors/circuit breakers sizes S00 to S2 up to 80 A, see [Catalog IC 10](#).

The 3RV1742 are approved as circuit breakers according to UL 489; they are a special variant of the 3RV1 motor starter protectors.

Type of construction

The 3RV1 motor starter protectors/circuit breakers are available in four sizes:

- Size S00 – width 45 mm, max. rated current 12 A, at 400 V AC suitable for three-phase motors up to 5.5 kW
- Size S0 – width 45 mm, max. rated current 25 A, at 400 V AC suitable for three-phase motors up to 11 kW
- Size S2 – width 55 mm, max. rated current 50 A, at 400 V AC suitable for three-phase motors up to 22 kW
- Size S3 – width 70 mm, max. rated current 100 A, at 400 V AC suitable for three-phase motors up to 45 kW

For sizes S00 to S2 of the 3RV2 motor starter protectors/circuit breakers up to 80 A, see [Catalog IC 10](#).

Circuit breakers acc. to UL 489

The 3RV1742 circuit breakers are available in size S3 (width 70 mm):

- Maximum rated current 70 A at 480 Y/277 V AC
- Maximum rated current 10 A to 30 A at 480 V AC

For sizes S00 and S0 of the 3RV27 and 3RV28 circuit breakers up to 22 A, see [Catalog IC 10](#).

Connection methods

The SIRIUS 3RV1 motor starter protectors/circuit breakers can be supplied with screw terminals and spring-type terminals.



Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC

3RV10 motor starter protectors are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EEx e.

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
	□□□	□	□	□	□	-	□	□	□	□	-	□	□	□	
Motor starter protectors/ circuit breakers	3 R V														
SIRIUS 1st generation	1														
Type of motor starter protector/ circuit breaker	□														
Size	□														
Switching capacity	□														
Setting range for overload release	□ □														
Trip class (CLASS)	□														
Connection methods	□														
With or without auxiliary switch	□														
Special versions	□ □ □ □														
Example	3 R V 1 0 3 1 - 4 A A 1 0														

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

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Accessories

Enclosures and front plates

Selection and ordering data

Version	Degree of protection	Integrated terminals	Width	For 3RV10 to 3RV16 motor starter protectors Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Molded-plastic enclosures for surface mounting											
 3RV1913-1DA00	With actuator diaphragm	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S00	▶	3RV1913-1CA00	1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S00	▶					3RV1913-1DA00
 3RV1923-1FA00	With rotary operating mechanism, lockable in 0 position	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S0	▶	3RV1923-1CA00	1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S0	▶					3RV1923-1DA00
				82 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S2	A					3RV1933-1DA00
 3RV1923-1GA00	With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S0	▶	3RV1923-1FA00	1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S0	A					3RV1933-1GA00
				82 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S2	A					3RV1933-1GA00
Cast aluminum enclosures for surface mounting											
 3RV1923-1DA01	With rotary operating mechanism, lockable in 0 position	IP65	PE ¹⁾	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S0	▶	3RV1923-1DA01	1	1 unit	41E	
				With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	IP65	PE ¹⁾					72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)
Molded-plastic enclosures for flush mounting											
 3RV1913-2DA00	With actuator diaphragm	IP55 (front side)	N and PE/ground	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S00	A	3RV1913-2DA00	1	1 unit	41E	
				With rotary operating mechanism, lockable in 0 position	IP55 (front side)	N and PE/ground					72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)
 3RV1923-2GA00	With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	IP55 (front side)	N and PE/ground	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S0	A	3RV1923-2GA00	1	1 unit	41E	

¹⁾ If required, an additional N terminal can be mounted (e.g. 8WA1011-1BG11).