

Auxiliary Output Module

RSBT Accessory

Type RSPMV

CARLO GAVAZZI



- 17.5mm DIN rail housing
- LED indication for supply ON
- Plug'n'play design
- Output (1): 100mA, Open collector, Normally Open (NO)
- Output (2): 3A SPDT relay *
- RoHS compliant
- CE, cULus (accessory of listed RSBT)

* Only applicable to RSPMV120

Product Description

The RSPM accessory is a DIN mounted module intended to be used as an additional accessory for RSBT softstarter. There are two variants of this product RSPMV110 with a single open-collector output and RSPMV120 which offers an additional SPDT relay contact. The RSPM is

designed to provide alarm information, generated by RSBT softstarter, to an external circuit. When connected to this external circuit, the open collector output may be used to provide higher level user information on the RSBT status and alarms.

Ordering Key

R S P M V 1 2 0

Side-mounting _____
 Plug In _____
 Module _____
 Version _____
 DIN mounted _____
 Number of Outputs _____
 Cable Length _____

Type Selection

Type	Number of Outputs	Output type	Mounting	Cable length
RSPMV110	1	Open-collector (NO)	DIN	150mm
RSPMV120	2	SPDT Relay (No/NC), Open-collector (NO)	DIN	150mm

General Specifications

Reaction time	
Alarm ON delay	< 200 ms
Alarm OFF delay	< 300 ms
Status indication LEDs	
Power supply ON	LED, green
Environment	
Degree of protection	IP20
Pollution degree	2
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Operating Humidity	<95% non condensing @ 40°C
Storage Temperature	-30°C to +70°C (-22°F to 158°F)
Housing	
Dimensions (DxWxH)	67 x 17.5 x 90 mm
CE Marking	Yes
Approvals	CE, cULus Listed
ROHS compliant	Yes
EMC	
Immunity	IEC/ EN 61000-6-2
Emission	IEC/ EN 61000-6-3
LVD	IEC/EN 60947-5-1

Housing Specifications

Weight	50g (approx.)
Housing colour	RAL7035
Protection category	IP20

Conductor Data

Output terminals	
Screw type (11,12,14, +, -)	M3
Tightening torque	0.4Nm (3.54 lb.in)
Stripping length	6.0 mm
Cross sectional area of cable (stranded) (11,12,14, +, -)	0.34 - 0.75mm ²
Cross sectional area of cable (solid) (11,12,14, +, -)	0.34 - 0.75mm ²
UL/ cUL rated data	
Rigid (solid or stranded)	AWG 1 x 22 18
Rigid (stranded)	AWG 2 x 22 18
Rigid (stranded)	AWG 1 x 22 + AWG 1 x 18

Input Specifications

Supply Input	Supply to the RSPM is provided via the cable connector when connected to the RSBT
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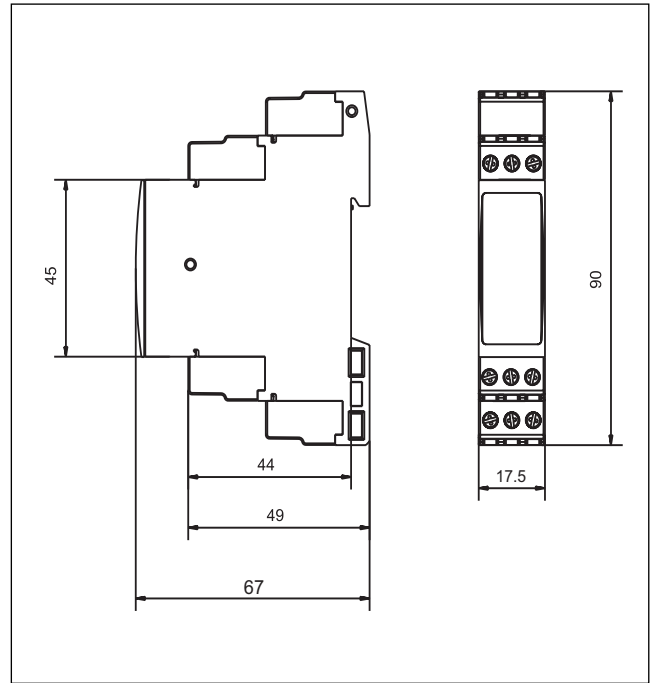
Output Specifications

Outputs	RSPMV110	1
	RSPMV120	2
Relay Output	SPDT relay* NO, NC, Changeover	
NPN/PNP Output	Open collector, NO	
Output current		
Maximum load current		
NPN-PNP Output	100mA	
Maximum Voltage	40VDC	
On-state power loss	< 800mW	
Contact Ratings*		
Relay:	UL	3A @ 240VAC
	IEC	3A @ 250VAC, 3A @ 30VDC

* Applicable to RSPMV120 only

Dimensions

Cable Length 150 mm



All dimensions in mm

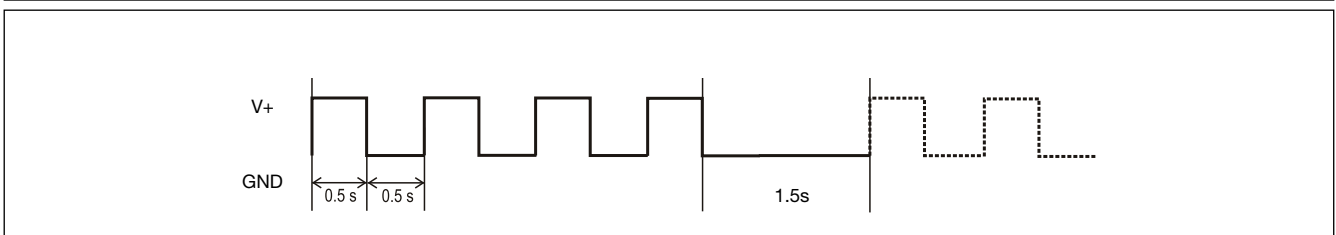
Mode of Operation

The output module shall operate as per below table monitoring the following alarms

Status/Alarm condition	Relay Contact	No. of pulses PNP/ NPN/ O/P *
Wrong Phase Sequence	11/12	2
Under/Overvoltage	11/12	3
Frequency out of range	11/12	4
Locked Rotor Condition (during ramping)	11/12	5
Ramp-up time > 1sec	11/12	6
Device Overtemperature	11/12	7
Overcurrent (during bypass)	11/12	8
Supply Voltage Unbalance	11/12	9
Supply Phase Loss	11/12	N/A
IdleState	11/14	N/A
Ramping State	11/12	N/A
Bypass Mode	11/14	N/A

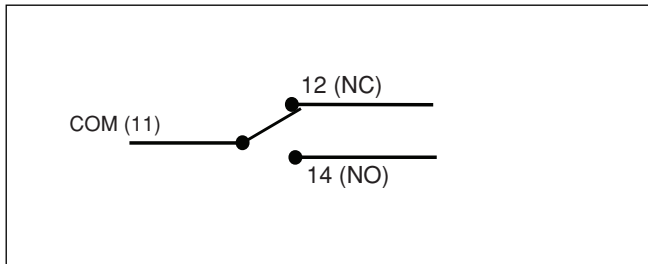
* Pulse duration as per diagram below

Open Collector Pulses (during alarm conditions)



* Open collector pulse sequence when open collector output is wired with NPN configuration as shown below.

Relay Output Configuration

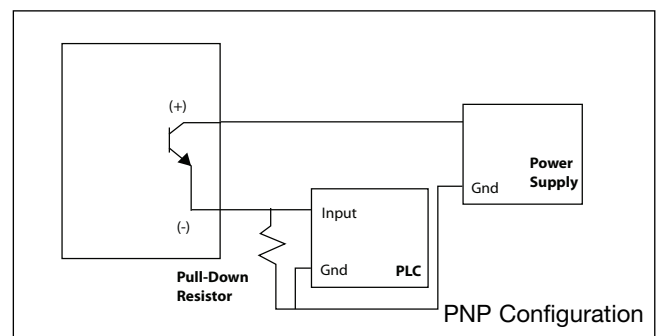
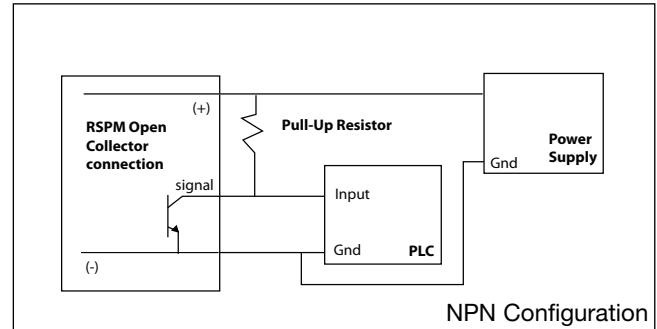


Mode of Operation

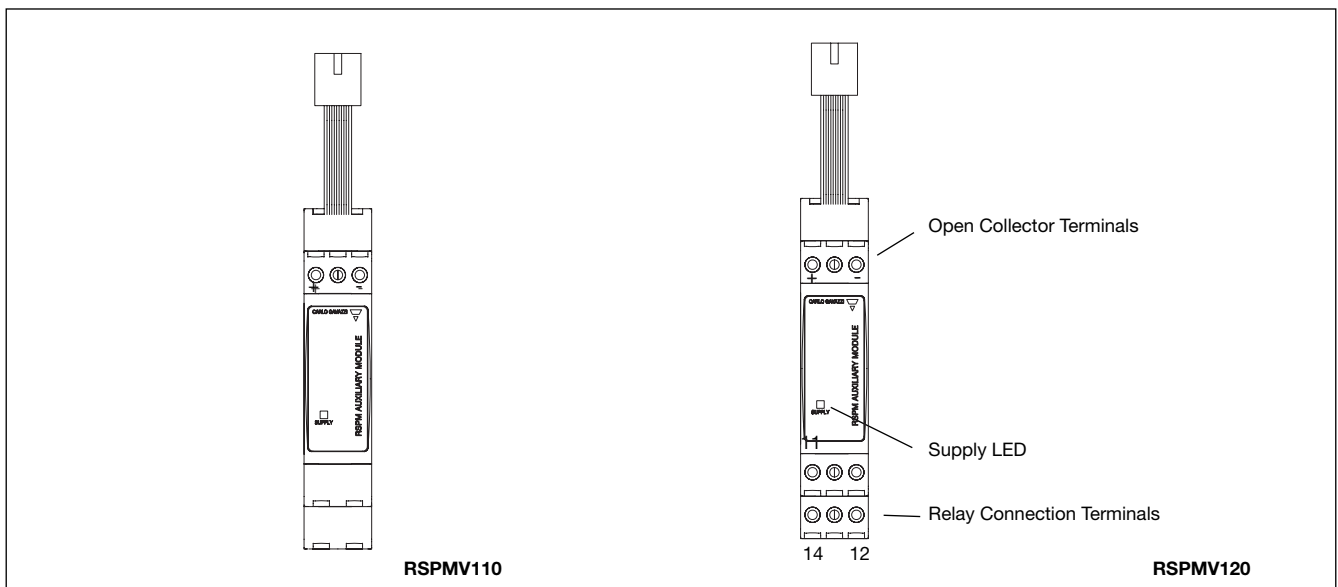
RSPM is supplied through the RSBT front terminal connection via the ribbon cable (provided with RSPM) when connected. Indication of the presence of the supply is provided via the green LED. When the RSBT softstarter triggers an alarm, the RSPM open collector output will start pulsating according to the alarm that is raised by RSBT. On the other hand, the relay contact position will be in accordance to the table overleaf.

Note: For more detailed operation on the alarms please refer to the RSBT datasheet.

Open Collector Output Configuration



Terminal Layout



Short Circuit Protection (according to EN/IEC 60947-5-1)

Type of coordination: 2

Rated short circuit current: 1kA when protected by semiconductor fuses
SIBA 4A, Class gr Art. no. 5017906.4