

SMRD4M1-2-U-CE Operating Instructions



70 x 90 mm DIN RAIL

SPECIFICATIONS		
Display	4 (Red) digits, 0.43" height, 7 seg LED LED's : 2(Red)	
No. of keys	3	
Supply Voltage	90 to 270 VAC, 50/60Hz	
Sensor Supply	12VDC, 30mA (±10%) (Short circuit protected)	
Rate Range	Auto ranging. RPS, RPM or RPH mode user selectable	
Set Points	High set-point and low set-point each programmable from 1 to 9999	
Operating modes	Under-speed, Over-speed and Dual-speed	
Error	10% of actual reading	
Count Inputs	5 to 30VDC from proximity switches, encoders, solid state devices, potential free contacts* like limit switches, relays	
Scale Factor	Programmable from 0.001 to 9.999 x 10n Where n = -3, -2, -1, 0, 1, 2	
Relay Output	2 relays, 1C/O each rated 5 A @ 230 VAC / 24 VDC	
Memory Retention	10 years	
Type of Protection	IP20 on terminal	
Input Speed Range	0.06 RPS to 166RPS	

ENVIRONMENTAL CONDITIONS		
Temperature	Operating : 0 to 55°C, Storage : -20 to 75°C.	
Humidity	95% RH	
Mounting	Din Rail Mounted	
Weight	193 grams	

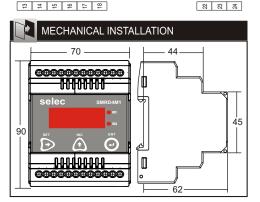
^{*}When using potential free contacts, it is recommended to utilize the +12V sensor supply provided in the unit..

WIRING DIAGRAM FOR COUNT INPUT

Potential free contacts (NPN) +12V CNT1 GND PNP COM NPN Potential free Contacts (NPN)

NOTE:

- If the sensors (Proximity / Encoder) require more than 30mA current, use external power supply to power the sensors.
- 2. For PNP type sensors, PNP-COM shorting is not required. The unit operates in PNP mode by default.
- 3. For NPN type sensors, NPN-COM should be short as shown in the below diagram.



Key Functions in Brief

To view programmed modes

- **Key**: Press once to view operating mode and rate
- **Key:** Press once to de-energize relays in manual mode.

To enter Configuration settings:

- **Key**: Press for 3sec to enter/ exit configuration mode OR to enter next configuration.
- Key :Shifts the blinking to next digit for every key press

CONFIGURATION SCHEME (Parameter setting)

Press the ENT () key for 3 seconds to enter/ exit the configuration settings.

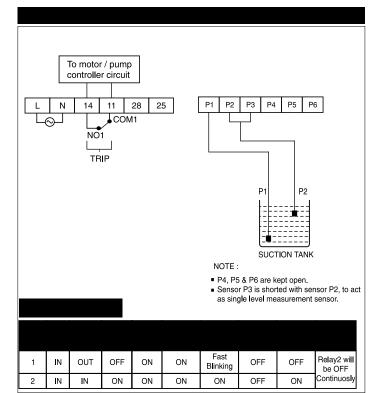
Configuration. Parameter	Display	Description
Initial Time Delay	∗Blinking for 3 seconds	Key: To go to next page before 3 seconds is complete
	00.0	Key: Increments the blinking digit after every key. press and rolls over from 0 to 9 Key: Shift the blinking to next digit (right) for every key press
Nuisance Time Delay	*Blinking for 3 seconds	Key :To go to next page before 3 seconds is complete
	00.0	Key: Increments the blinking digit after every key. press and rolls over from 0 to 9 Key: Shift the blinking to next digit (right) for every key press
Operating Mode	*Blinking for 3 seconds	Key :To go to next page before 3 seconds is complete
	auar	Key: Changes mode of operating Range: Dual, Under, Over
Rate Mode	*Blinking for 3 seconds	Key :To go to next page before 3 seconds is complete
	ΓPā	Key: Changes factor of rate Range: RPM, RPS, RPH Default: RPM
Relay Reset - Mode	*Blinking for 3 seconds	Key : To go to next page before 3 seconds is complete
	ANFO	Key : Changes relay reset mode
Scale Factor Mantissa	*Blinking for 3 seconds	Range: Auto, Manual Default: Auto Key: To go to next page before 3 seconds is complete
	1.000	Key: Increments the blinking digit after every key press n = -3, -2, -1, 0, 1, 2
Exponent .	*Blinking for 3 seconds	Key :To go to next page before 3 seconds is complete
	0	Key: Increments value (0-5). No action from 0-4. Factory reset when ENT is pressed at 5.
Factory reset	*Blinking for 3 seconds	Key :To go to next page before 3 seconds is complete
		Key: Increments value (0-5). No action from 0-4. Factory reset when ENT is pressed at 5.

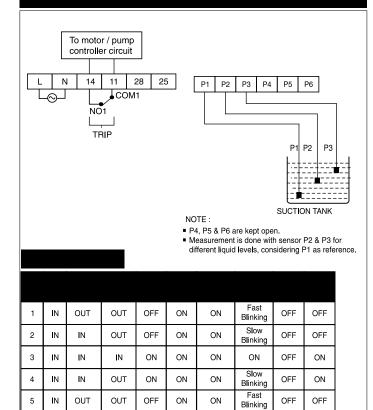
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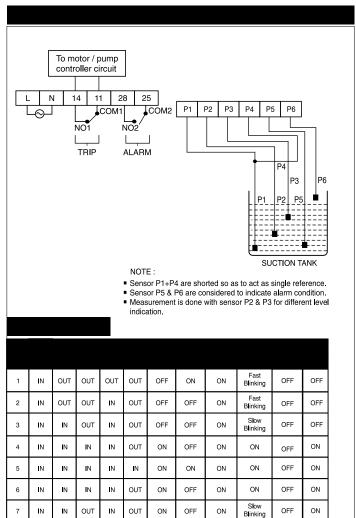
- N v⊞Shifts the blinking to next digit (right) for every key press™™™™™

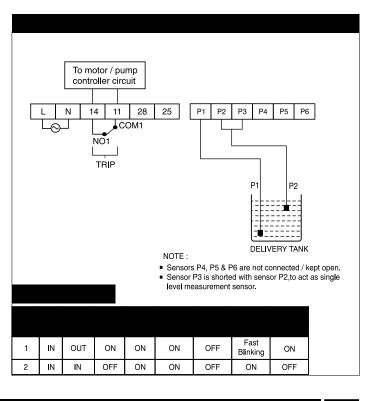
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11d∨‡a, Ƈ], Š@ 11111111111Y zvy	Blinking for 3 seconds	Mikey: រាប់ថ្ងៃថាថែរថែរដែរជាជ្រង់ចូខ before 3 seconds is complete
	0100	Key : Increments value blinking digit











OFF

OFF

ON

8

IN OUT

IN

OUT

IN OUT

OUT

Fast Blinking

Blinking

OFF

OFF