



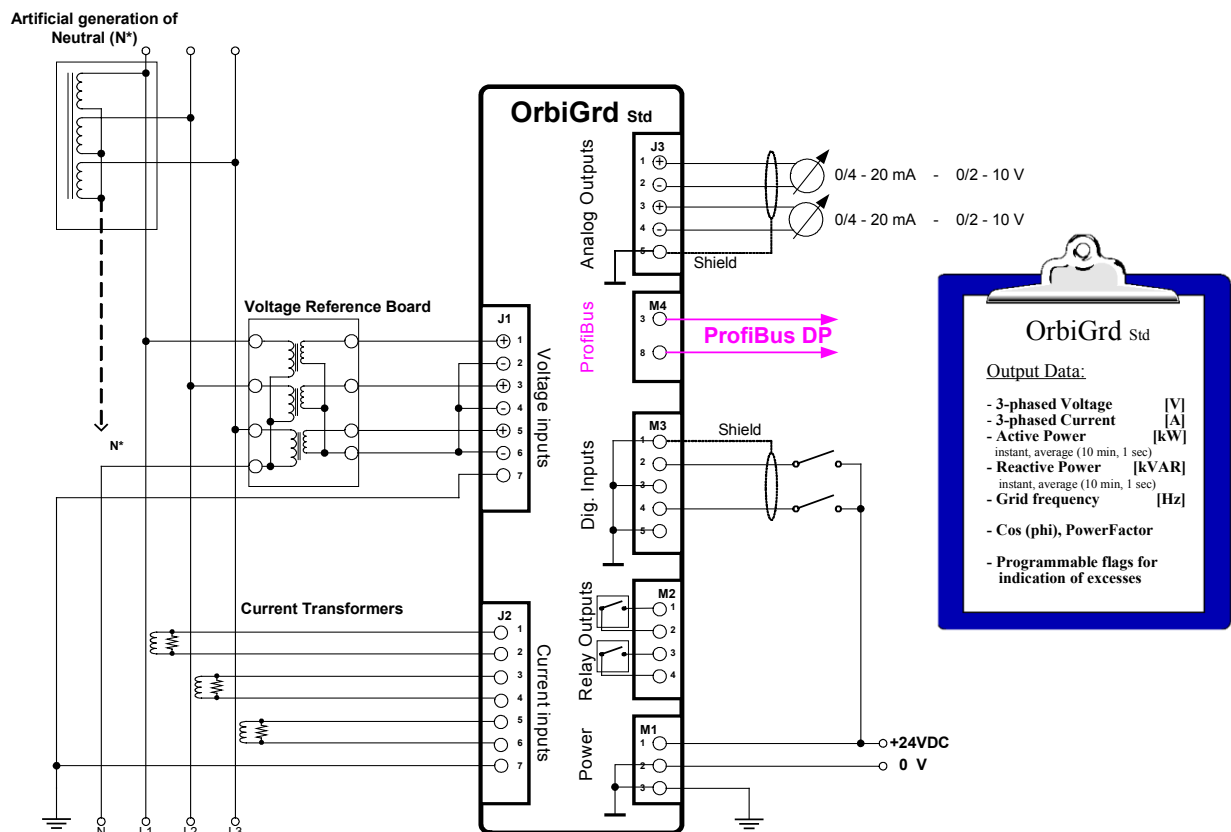
OrbiGrd Std

- Profibus DP interface
- 2 Digital inputs
- 2 Relay outputs
- 3 Phase voltage inputs
- 3 Phase current inputs
- 2 Analogue outputs
- DIN-rail snap-on mounting
- Programmable configuration



OrbiGrd standard DP slave module is designed for monitoring and controlling a three-phased grid connected to symmetrical loads. It is typically applicable in a wind turbine. Voltage and current references from all 3 phases enable the module to compute the actual grid and load conditions. Synchronous measurement of the three-phased 12 bit dual polarity voltage and current input at a 4k/sec sampling rate provides an extremely accurate true RMS measurement. Two 12 bit programmable analogue outputs are configurable for 0[4]-20mA and 0[2]-10V.

The Profibus DP slave interface is used for process monitoring, control, configuration and diagnostics. A GSD[E] file provides the Master with all needed information about the module and the data protocol.



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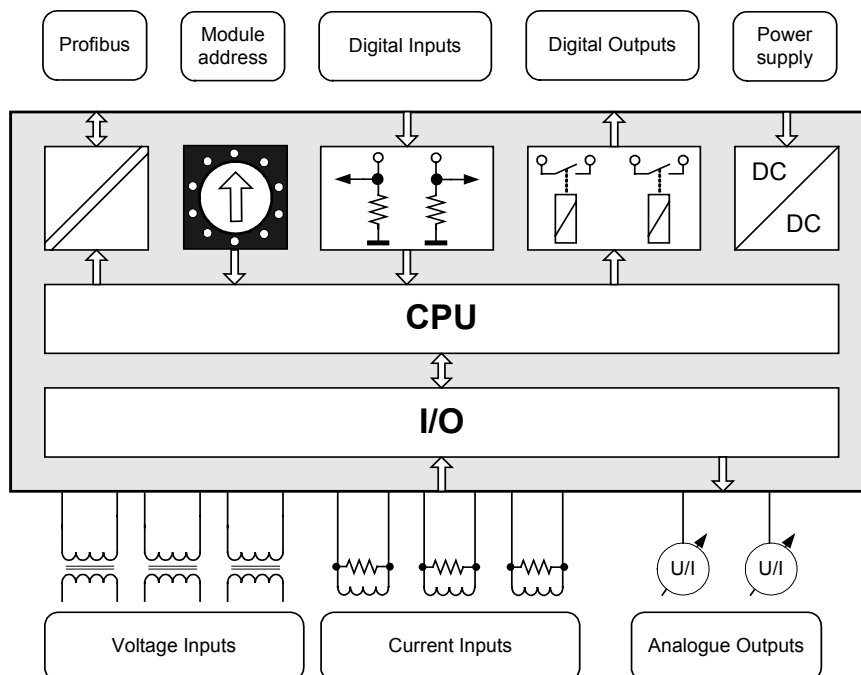
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Electrical specifications:

Parameter	Conditions	Min.	Typ.	Max.	Units
Power supply					
Supply voltage		19,0	24,0	30,0	Vdc
Power consumption	24,0 Vdc \pm 10% supply voltage			8,0	W
Relay outputs					
Switching voltage	Resistive load ($\cos\phi = 1$)			380 / 125	Vac / Vdc
Switching current				5 / 5	Aac / Adc
Switching capacity				1250 / 150	VA / W
Scan cycle			100		msec
Digital inputs					
Input impedance			4400		Ω
Input voltage	Continuous		24,0	\pm 60,0	V
Low level input				8,0	V
High level input		16,0			V
Scan cycle			100		msec
Profibus					
Baud rate		9600		12M	Baud
Analogue inputs (AC)					
Input impedance			16,2		k Ω
Input range				\pm 2,5	Vrms
Input peak				\pm 4,0	V
Frequency range		42		69	Hz
Harmonics	@ 50Hz			40th	
Analogue accuracy (AC)					
Voltage / Current		0,2			%FSR
Real power		0,5			%FSR
Apparent power		0,5			%FSR
Reactive power		0,6			%FSR
Power factor		0,4			%FSR
Frequency		0,1			%FSR
Temperature range					
Temperature stability		-20		150	$^{\circ}$ C
Analogue outputs (DC)					
Accuracy	0 - 1 mA / 1 - 20 mA output	0,3 / 0,2			%FSR
	0 - 0,5 V / 0,5 - 10 V output	0,3 / 0,2			%FSR
Input impedance	Current mode			600	Ω
Input impedance	Voltage mode		500		Ω

Electromagnetic compatibility : EN 50 081-2 Generic emission standard
 EN 50 082-2 Generic immunity standard
Mounting: Snap-on DIN rail adapter TS 35
 2 Hole mounting

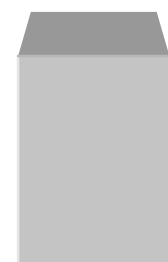
Industrial environment
 Industrial environment
 EN 50 022
 DIN 46 121 / DIN 43 660



Mechanical dimensions:



150 mm



110 mm

75 mm