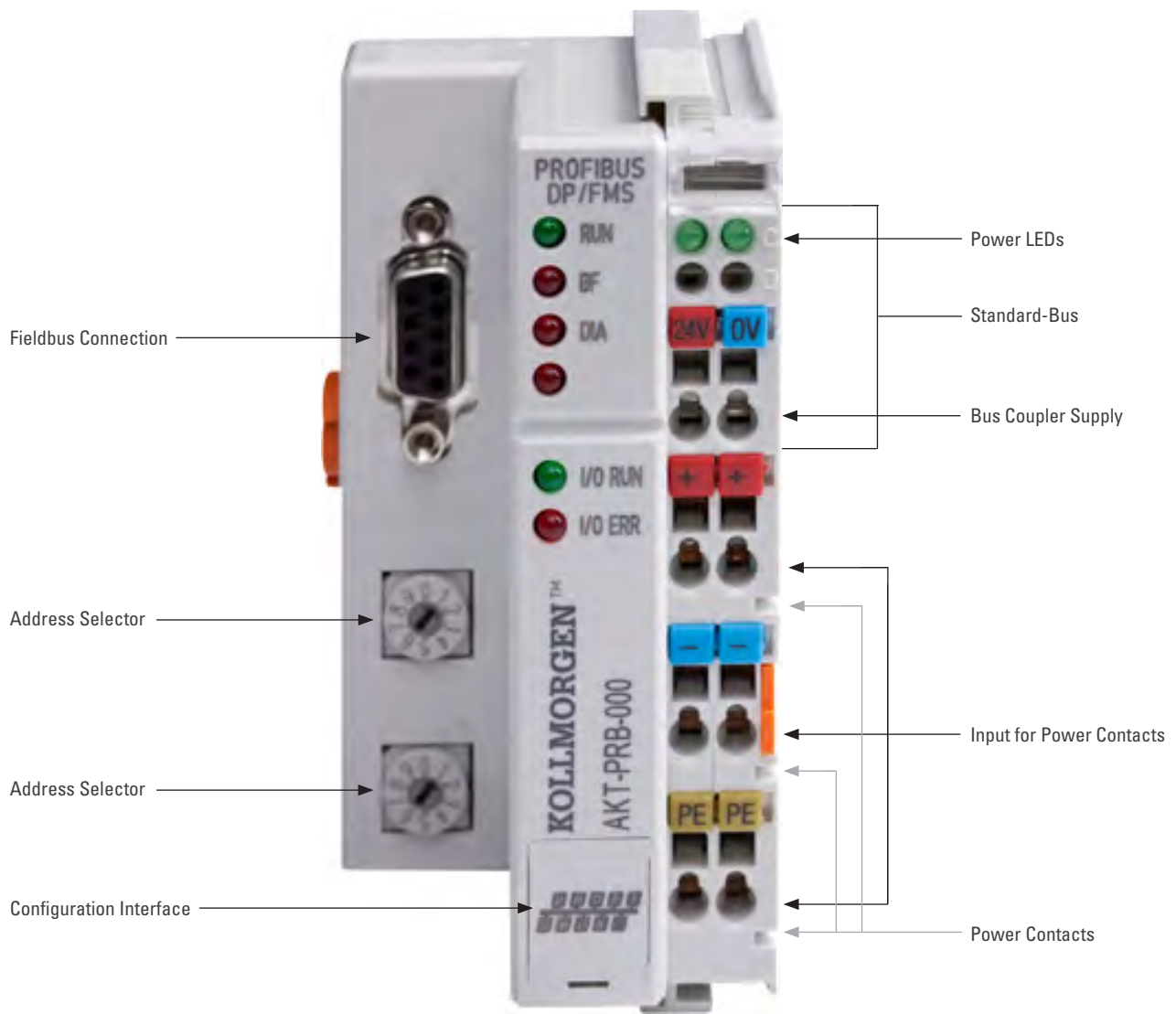


PROFIBUS Coupler

The Bus Coupler connects the PROFIBUS system to the electronic terminal blocks, which can be extended in modular fashion. One unit consists of the Bus Coupler, any number of up to 64 terminals and one end terminal. Up to 64 digital input/output terminals can be connected.

The Bus Coupler recognizes the connected terminals and automatically generates the affiliations of the inputs/ outputs to the bytes of the process image. The first input/output signal is inserted in the first bit of one byte (LSB), beginning from the left. The Bus Coupler inserts further signals in this byte. Inputs and outputs are clearly separated. The Bus Coupler automatically begins a further byte if the number of inputs or outputs exceeds 8 bits.



PROFIBUS Coupler

The Bus Coupler supports the operation of all Bus Terminals. As far as the user is concerned, handling of the analog inputs/outputs is not different to other series. The information is available in the process image of the controller for processing in the form of a byte array.

The Bus Terminals can be controlled by the control system. Via function blocks (FBs), the programmable logic controller (PLC) or the Programmable Automation Controller (PAC) handles configuration of the complete periphery during the start up phase. If required, the controller can upload the decentrally created configuration data in order to centrally manage and store this data. Therefore, new adjustments are not necessary in the event of replacement of a Bus Terminal. The controller automatically sets the required setting on power up.

Electrical and Mechanical Specification	AKT-PRB-000-000				
Number of I/O stations	100 with repeater				
Number of I/O points	Approx. 6,000, depending on the master				
Data transfer medium	Shielded copper cable, 2 x 0.25 mm ²				
Max. cable length	1,200 m	1,000 m	400 m	200 m	100 m
Data transfer rates (system data)	9.6/19.2/93.75 kbaud	187.5 kbaud	500 kbaud	1,500 kbaud	...3, 6, 12 Mbaud
Data transfer time (system data)	Approx. 3 ms (10 stations for 32 bit input and output each)			approx. 0.5 ms	
Number of Bus Terminals	64				
Max. number of bytes fieldbus	64 byte input and 64 byte output (DP and FMS mode), 128 byte input and 128 byte output (only DP mode)				
Digital peripheral signals	512 inputs/outputs				
Analog peripheral signals	64 inputs/outputs (only DP mode)				
Configuration possibility	Via the controller				
Data transfer rates	12 Mbaud				
Bus interface	1 x D-sub 9-pin socket with shielding				
Power supply	24 V DC (-15 %/+20 %)				
Input current	70 mA + (total K-bus current)/4, 500 mA max.				
Starting current	2.5 x continuous current				
Recommended fuse	≤ 10 A				
Supply current K-bus	500 mA				
Power contacts	24 V DC max./10 A max.				
Electrical isolation	500 V _{rms} (power contact/supply voltage/fieldbus)				
Weight	Approx. 170 g				
Operating/storage temperature	0...+55 °C/-25...+85 °C				
Relative humidity	95 %, no condensation				
Vibration/shock resistance	Conforms to EN 60068-2-6/EN 60068-2-27/29				
EMC immunity/emission	Conforms to EN 61000-6-2/EN 61000-6-4				
Protect. class/installation pos.	IP 20/variable				