

> PRIVA BLUE ID S-LINE PI60

Power injection module



A Priva Blue ID S-Line PI60 Power injection module is used to power a new, fused power supply segment.

Characteristics

- voltage monitoring
- transferring communications signals
- 24 V system power supply monitoring
- wiring uses spring terminals

Clear indication



Legend

A	LED for status of module
B	LED for system power

LED for status of module

The LED shows the status of the module. The LED is on continuously when the module is working correctly. If not, the LED flashes or the LED is off.

LED for system power

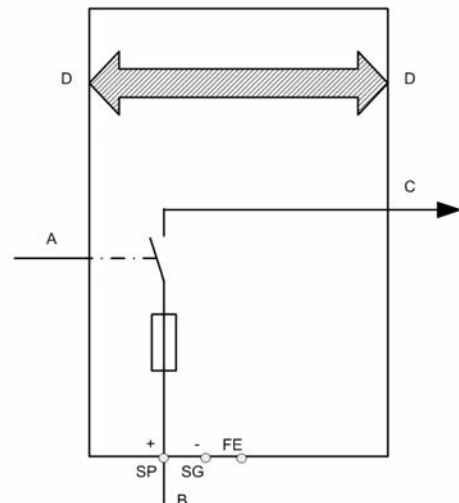
An LED indicates the status of the system power. The LED is on if the power supply is working correctly.

LED details

Details about statuses and indications of modules, input and/or outputs and the related LED colours and flashing patterns, are described in the *LEDs and Priva Blue ID Lifeline* appendix of the *Installing and commissioning* manual.

New power supply segment

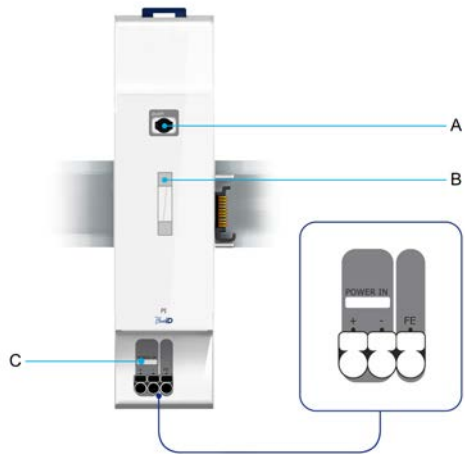
The I/O modules in Priva Blue ID are powered by the system power supply (24 VDC). This system power is connected via the controller and then distributed via the base of the I/O modules. If the I/O modules demand more power than can be supplied via the controller, a Priva Blue ID S-Line PI60 must be used. TC Engineer calculates this for you.



On the PI module the system power present (A) is interrupted and re-established (B). This creates a new power supply segment (C). To do this both A and B should be present therefore. The internal communication signals (D) are transferred as normal.

This module may not be removed or installed while the power is connected.

Connections



Legend

A	release mechanism for module cover, fuse can be accessed by removing cover
B	glass fuse
C	LED for system power
+	+24 VDC (SP)
-	0 (SG)
FE	functional earth

PI module specifications

General	
Article description	Priva Blue ID S-Line PI60 Power injection module
Article number	5050010 (V03:01 and higher)
Dimensions (XYZ) ¹	161.5 x 40 x 58 mm (6.36 x 1.57 x 2.28 inches)
Weight	150 grams
Maximum power consumption	0.9 W
Typical power dissipation ²	0.9 W
MTBF ³	4,380,000 hours
Installation	clicks onto DIN rail
Material	mixture of polycarbonate and ABS
Connector type for power supply	terminal block
Permitted core cross section area	solid: 0.2 mm ² ... 4 mm ² flexible: ... 2.5 mm ² flexible with ferrule connector: 0.25 mm ² ... 1.5 mm ²
Indication	<ul style="list-style-type: none"> green LED for status of module green LED for system power

¹ Excluding 1.1 mm room between the modules

² Dissipation under the following conditions:

- I/O load of 50%
- Energy saving mode on (LEDs off)

³ The MTBF is calculated according to the *Telcordia SR-332 standard Issue 2* under the following conditions:

- ambient temperature: 35 ... 50 °C
- supply voltage: 24 VDC
- time in operation per day: 24 hours
- reliability level: 60 %



Electrical	
Input voltage between SP and SG	21.6 VDC ... 26.4 VDC (24 VDC \pm 10 %)
Maximum input current	2.5 A
Minimum switch off voltage	21.1 VDC
Maximum switch off voltage	26.9 VDC
Maximum voltage between: FE and SP FE and SG	\pm 43 V peak
Capacity between: FE and SP FE and SG	1nF nominal
Resistance between FE and SG	1 M Ω nominal
Protection	input is protected against incorrect connection of \pm 30 VDC and 30 VAC
Glass fuse	2.5 AT
Accuracy of internal temperature measurement	\pm 2 °C

Power supply	Requirements
The system power supply must comply with the following requirements.	<ul style="list-style-type: none"> output voltage: 21.6 ... 26.4 VDC double insulation between input and output Class 2 power supply for UL508, UL916, CSA C22.2 No. 14 and No. 205





General specifications of controllers, modules and bases

Housing	
IP code	IP30 (IEC 60529)
Flammability class	V-0 (UL 94)
Recycle code	7
Colour	release surfaces of module and DIN rail release: blue (RAL5013) other parts: white (RAL9003)
Device type	open device, for use in a pollution degree 2 environment

Installation and connection	
Installation	<p>in control panel:</p> <ul style="list-style-type: none"> accessible to authorized personnel only can be clicked onto the DIN rail that is positioned horizontally or vertically on the mounting plate <p>Note: The controller, SC module and SN module may only be mounted horizontally.</p> <p>in panel door integration in control panel:</p> <ul style="list-style-type: none"> accessible to authorized personnel only can be clicked onto the DIN rail that is positioned horizontally on the mounting plate
DIN-rail type	35 x 7.5 mm (height x depth), in accordance with IEC 60715
Maximum width of I/O modules, bus extension modules and controller	20 mm

Environment	
Permitted temperature inside control cabinet during normal operation with horizontally mounted modules only (without airflow)	0 ... 50 °C
Permitted temperature inside control cabinet during normal operation with vertically mounted modules only (without airflow)	0 ... 35 °C
Permitted temperature during transport and storage	-20 ... 70 °C
Permitted relative ambient humidity	10 % ... 95 % (non-condensing)
Shock and vibration resistance	IEC 61131-2
Installation category	II

Legislation and standards

Canada / USA		<ul style="list-style-type: none"> • UL 508:2005 (industrial control equipment) • UL 916:2007 (energy management equipment) • UL 61010-1:2004 (measurement and control equipment) • CSA C22.2 No 14-10: 2011 (industrial control equipment) • CSA C22.2 No 205-12: 2012 (signal equipment) • CSA C22.2 No 61010-1-04 (measurement and control equipment)
	EMC	<ul style="list-style-type: none"> • complies with 47 CFR Part 15 Subpart B, Class B (FCC Rules) Operation is subject to the following two conditions: <ol style="list-style-type: none"> 1. This system may not cause harmful interference. 2. This system must accept any interference received, including interference that may cause undesired operation. • ISM-system, complies with Canadian ICES-001
Europe		<ul style="list-style-type: none"> • Low voltage directive 2006/95/CE: <ul style="list-style-type: none"> • EN 61010-1:2010 (measurement and control equipment) • EMC directive 2004/108/EC: <ul style="list-style-type: none"> • EN 61326-1:2006 (measurement and control equipment) • EN 61000-6-2:2005 (generic immunity standard) • EN 61000-6-3:2007 (generic emission standard) • RoHS directive 2011/65/EU
		complies with the WEEE directive 2002/96/EC
International		<ul style="list-style-type: none"> • The Priva Blue ID S-Line S10 Controller is BTL registered at BACnet International. • The Priva Blue ID S-Line S10 Controller is BACnet certified in accordance with ISO 16484-5/6. • Priva is a member of the BACnet Interest Group Europe.

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