Rittal – The System.

Faster - better - everywhere.



DK 7856.016 **PSM** busbars

State: 31/07/2025 (Source: rittal.com/uae-en)



DK 7856.016 - PSM busbars

One or two infeeds, with on or three phases, redundant after changing the plug-in module's direction of connection. With measurement option in conjunction with the CMC III system.

Features

| Model No. | DK 7856.016 |
|-------------------------------|---|
| Design | With measurement of voltage, current and power (consumption), via CMC-TC, remote-controllable |
| Product description | The modular system facilitates basic configuration of the racks, thanks to a vertical support rail with single-/3-phase infeed. The various socket modules to supply the active components may be snap-fitted into the support rail. This can even be done whilst the system is operational, because the support section is shock hazard-protected. |
| Benefits | Modules may be retrofitted whilst operational. |
| Technical specifications | Each plug-in module picks off a phase on the support rail, either from infeed or from the redundant infeed, depending on the direction of connection. Depending on the design, single-/3-phase construction with a maximum current of 2 x (3 x 16 A/32 A). 3-phase redundant infeed supported. The redundant circuit is completely separate from the 3 phases of the support rail. Modules may be equipped with integral overcurrent protection, so that only the affected module is deactivated in the event of an excessively high current. The other modules remain operational. |
| Material | Aluminium section, natural anodised |
| Type of electrical connection | Jack |
| Qty. | 2 |
| Phases per infeed | 3~ |
| Rated current (max.) | 16 A |
| Module slots (max.) | 6 |
| | |

Features

| To fit | Enclosure type: TS 8 |
|-----------------------------|----------------------|
| | TS IT |
| | VX IT |
| | Height: 2,000 mm |
| Operating temperature range | 5 °C45 °C |
| Ambient humidity (non- | 595 % |
| condensing) | |
| Storage temperature range | -20 °C60 °C |
| Packs of | 1 pc(s). |
| Net weight | 4.759 |
| Gross weight | 5.009 |
| Customs tariff number | 85369001 |
| EAN | 4028177507180 |
| ETIM 9 | EC000215 |
| ECLASS 8.0 | 27371306 |
| | |

Approvals

| Explanations Declaration of conformity |
|--|
|--|

Tender text

Power System Module busbar with measuring system

The modular system enables a basic configuration using vertical support rails and a three-phase supply to be installed for each rack. The system also has a redundant power supply configuration as a second power supply has been provided for each of the rails. The vertical support rails ensure that the slots can be used over the full height of the enclosure and the redundant supply comes from the second separate supply. Socket modules can be snapped into the support rails. The contact hazard protection design of the busbar ensures that socket modules do not have to be fitted in all of the slots.

Socket modules are available is different country versions, i.e. IEC IEC320 C13, earthing-pin and F/B, CH, USA & UK.

A mixture of all of the modules can be fitted in the rails. 6 socket modules can be used with each 2m rail. A total of 42 sockets are available if IEC320 modules are fitted.

The PSM rail measures the active power and the power for all 3 phases. It is displayed on a local display. The PSM rail can be remotely administered and configured in conjunction with the CMC-TC via standard protocols (SNMP, http). Measuring and monitoring of the current per phase. Min./max. limits can be set up. Measuring range 0 -16A. Measuring and monitoring of the performance per phase. Min./max. limits can be set up. Measuring range 1 - 6 KW. Alarms indicated by a flashing display. Remote administration of the PSM rail, remote limit modifying and monitoring, SNMP trap message for alarms.

Installation via the plug & play system:

The busbar can be installed in a flexRack(i) without having to use an adaptor or can be retrofitted to all Rittal TS / PS racks using a DK 7856.011 mounting kit.

The power is supplied via a 5-pin connection socket using tension-spring technology.

A pre-configured 3 m connection cable fitted with an IEC309 AC plug is also available.

All of the socket modules can be upgraded whilst working.

3-phase overvoltage protection:

Overvoltage protection is available for every 3-phase supply. Overvoltage protection can also be fitted as an upgrade. Integrated visual function checks Overvoltage protection has been designed to meet Class D requirements (different use with local sockets).

Technical fittings:

3-phase configuration with a max. of 3 16 A per power circuit
Two separate power circuits per support rail
Redundant power circuit 2 has a completely separate potential from power circuit 1
The connection direction of the socket module can be selected to determine if power circuit 1 or redundant power circuit 2 will be used.
A socket module can be upgraded whilst working Every module can be selected with / without an integrated circuit breaker

Technical specifications:

Three-phase voltage range 110 V - 400 V AC 50/60 Hz, neutral line is not needed

Humidity range: 5% - 95% relative humidity,

non-condensing

Protection category IP 20

Aluminium H-section version: W x H x D [mm]: 60 x 1908

x 60

Max. current per supply 3 x 16 A

Temperature application range: +5°C - +45°C