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DK 7859.420

PSM measurement modules with CAN bus

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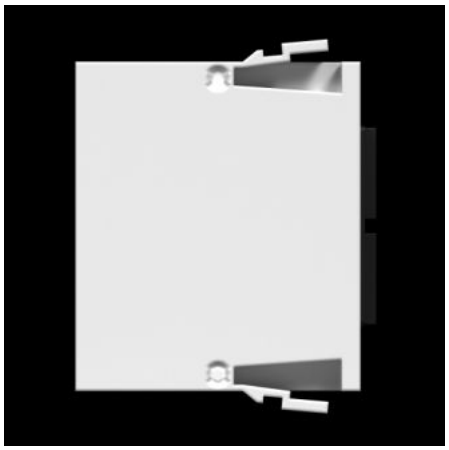
FRIEDHELM LOH GROUP

DK 7859.420 - PSM measurement modules with CAN bus for PSM busbars

PSM measurement modules with switching functions for outputs and energy measurement. Versions with IEC 60320 C13 & C19 slots and CEE 7/3 (earthing contact socket) available.





Features

Model No.	DK 7859.420
Product description	A power meter and switching functions for the output slots can be added to any PSM busbar with these PSM plug-in modules. The modules are also suitable for upgrading existing PSM installations if it becomes necessary to record the power data or add a switching option for the connected equipment. There are three variants available with different socket types. In the PSM busbar, the PSM modules occupy two module slots each. Measurements are displayed locally on a backlit LC display. For quick checks, the colour changes to red if current and power limits are exceeded.

Features

Benefits	Simple, shock-hazard-protected, plug & play installation with the system operational PSM module is easily fitted into and removed from the PSM busbar, allowing it to be used at changing locations Compatible with the European PSM busbar range CAN bus for direct connection to CMC III system (RJ 45, 2 x socket) In redundant systems, the circuit may be switched over by rotating the module Suitable for use at ambient temperatures of up to +60 °C Facilitates the implementation of requirements to ISO 50001 and EN 50600-2-2
Function principle	Measurement of power consumption per module Output slots may be switched individually and in groups via CMC III Status LEDs for CAN bus communication per module LC matrix display with multi-coloured backlight for local display Location sensor for correct display and Web view in 90° increments Adjustable limits for voltage, current and active power Configurable overload detection per module High level of measurement accuracy Alarm signalling via the display Universal connector lock, IEC 60320, C13 and C19 slots that are not needed may be closed
Material	Socket inserts: Plastic (PA6 GF 30 V1) Section: Aluminium, anodised
Supply includes	PSM measurement modules with CAN bus CAN bus connection cable, 1 m
Distribution output per module	3,680 W
Switching load per relay	4,000 VA
Length	500 mm
Contamination level	2
Interface bus system	2 x CAN bus interfaces to CMC III (max. 16 on PU/4 on PU Compact) 2 x RJ45 (connection to CMC)
Qty.	1
Relay version	Dual coil, bistable

Features

Rated operating voltage	18 V (DC) - 24 V (DC), power supply via CMC III system
Input voltage	230 V AC
Tolerance of input voltage	10 %
Rated current	16 A
Required number of module slots	2
No. of participating PU compact (max.)	4
No. of participating PU (max.)	16
Directives	Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU
IP protection category to IEC 60 529	IP 20
Monitoring	Alarm management via CMC III (e.g. e-mail or text message) Visualisation of the switching status on the CMC III website and RiZone Up to 16 PSM modules on one CMC III PU (per IP address) Rights management via CMC III (e.g. restriction of the switching function)
Standards	EN 50 600-2-2 EN 60950
Measurement functions, description	Voltage V, current A, frequency Hz Active power kW, active energy kWh Reactive power kVar, reactive energy kVarh Apparent power kVA, apparent energy kVAh Power factor cosPhi, crest factor Operating hours meter d, h, min Measurement accuracy of ± 1% Resettable measurement functions / reset via software / interval measurement: Active energy kWh, operating hours meter h, threshold values (voltage, current, power) freely configurable
Protocols	Network functionality (only in conjunction with CMC III system): IPv4, IPv6, SNMPv3, Modbus/TCP, OPC-UA

Features

Dimensions	Width: 53 mm Depth: 45 mm Length: 500 mm
Maximum operating altitude	2,000 m
Operating temperature range	5 °C...60 °C
Ambient humidity (non-condensing)	90 %
Sockets	2 x C13 / 4 x C19
Relative humidity (non-condensing)	10 %
Storage temperature range	-20 °C...70 °C
Packs of	1 pc(s).
Net weight	0.782 kg
Gross weight	0.992 kg
PCF per pack (cradle-to-gate)	3.8 kg CO2 eq (Cat B)
CRA risk class	Default (Low Risk)
Note on PCF category	Category B: PCF value (cradle-to-gate) based on the product weight, approximately calculated and self-declared
Customs tariff number	85469010
ETIM 9	EC000330
ECLASS 8.0	27371306
Product description	DK PSM measuring module, for modular PSM power distribution. Occupies 2 slots in the busbar. Output: IEC 60 320 4 x C19, 2 x C13, input: 207 V – 250 V, 16 A, (max. 3680 W)

Approvals

Explanations	Declaration of conformity