

2-pole HE power system

Designed with customer flexibility in mind

This small power dense system is purely based on pluggable breakers and rectifiers and can easily be configured to fit your required application, even in field. The combination of Flatpack S HE rectifiers and Smartpack S controller ensures safe, reliable and environmental friendly operation. With its shallow depth and flexibility the Flatpack S 2U 2-pole system fits most cabinets and is thereby excellent as replacement unit.



Flatpack S 2U/3R 2-pole 24V_{DC} (125A system with 2-pole distribution)

Doc MFGS0302.XXX.DS3 – rev1

APPLICATIONS

RAILWAY & METRO INFRASTRUCTURE

- Control & Protection
- Signaling
- GSM-R
- Safety Systems
- Communication systems

POWER UTILITIES

- Control & Protection
- SCADA Systems
- Emergency lighting
- Diesel start applications

OFFSHORE – MARINE

- Safety and Automation Systems
- Communication onboard ships



Smartpack S Controller



Flatpack S 24V Rectifier

KEY FEATURES

- COMPLETE SYSTEM
- SMARTPACK S CONTROLLER
 - HOT PLUGGABLE
- HIGH EFFICIENCY RECTIFIERS
 - HOT PLUGGABLE
- 2-POLE BATTERY DISTRIBUTION
 - PLUGGABLE BREAKERS
 - OPTIONAL LVBD
- 2-POLE LOAD DISTRIBUTION
 - 10 X 20A MCB POSITIONS
 - PLUGGABLE BREAKERS
- ADV. CONTROL AND MONITORING
 - EMBEDDED ETHERNET PORT
- 260MM SYSTEM DEPTH
 - PERFECT AS REPLACEMENT UNIT
- 2U HEIGHT
 - INCLUDING DISTRIBUTION
- 19" WIDE
 - FIT STANDARD RACKS AND CABINETS
- GLOBAL APPROVALS

Flatpack S 2U/3R 2-pole 24V_{DC}

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MODEL	FPS 2U/3R 2-POLE 24V	FPS 2U/3R 2-POLE 24V LVBD
Part number	MFGS0302.001	MFGS0302.002

INPUT DATA

Voltage (nominal)	185V _{AC/DC} – 305V _{AC} / 300V _{DC} ¹⁾
Mains configuration (individual feed)	230V _{AC} , 3 x 1 phase or 3 phase (Δ) 230/400V _{AC} , 3 phase (Y)
Maximum current	5,9A _{rms} individual feed / 17,7A _{rms} single feed
Mains connection	4mm ² terminal blocks, rear connection
Frequency	45 – 66Hz

OUTPUT DATA

Nominal Voltage	24V _{DC}
Maximum current (total)	125A _{DC}
Maximum current distribution (total)	100A _{DC}

BATTERY DISTRIBUTION

Breaker, 2-pole pluggable D-frame	1 x 100A _{max}	
LVBD	N/A	Default
Connection (rear)	M6 studs (25mm ²)	
Battery fuse alarm	Auxiliary switch	

LOAD DISTRIBUTION

Breakers, 2-pole pluggable B-frame	10 x 20A _{max}
Connection (rear)	Screw terminals (10mm ²)
Load fuse alarm	Auxiliary switch

BULK OUTPUT

Protection	Unfused
Connection (rear)	M6 Studs (25mm ²)

CONTROL & MONITORING

Smartpack S	6 x Input / Output and Ethernet ²⁾
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OTHER SPECIFICATIONS

Temperature	Operating: -40 to + 65°C full / +85°C derated Storage: -40 to + 85°C
Coding	Coding to prevent insertion of incorrect power module
Dimensions (W x H x D)	482,5 x 89 x 250mm
Mounting	19" Flush mount
Cooling	30mm space in front and back required for air flow
Weight (without rectifiers and breakers)	Approx. 7kg

DESIGN STANDARDS

Electrical safety	UL 60950-1, EN 60950-1, CSA C22.2
EMC	ETSI EN 300 386 V.1.6.1 EN 61000-6-1 / -2 / -3 / -4 FCC Part 15 Subpart 109
Environment	ETSI 300 019-2 -1 Class 1.2 ETSI 300 019-2 -1 Class 2.3 ETSI 300 019-2 -1 Class 3.2

1) See Flatpack S datasheet for details

2) See Smartpack S datasheet for details