

EPOS Mini -RU

DC Power System



GENERAL DESCRIPTION

The EPOS Mini is a modular power supply system designed to supply uninterrupted DC power for demanding telecom and industrial applications, providing 300 W to 2400 W at 48 VDC or 60 VDC output.

Depending on selected configuration the system provides space for AC connection, up to four or eight rectifiers, system controller, battery and load distribution. All in one package.

Local system control and battery monitoring is accomplished through the system controller. An optional advanced control package enables remote operation of the system and intelligent battery management with user-friendly PC-based software package.

FEATURES

- Convection cooled
- Available in 48V and 60V
- Max output 300 W to 2400 W
- Wall or 19" rack-mounted
- W: 19" std, H: 4U or 10U, D: 365 mm
- Compact design
- All-inclusive distribution with LVD and PLD options
- Rectifier: ERM 48/60-300
- Remote control (Ethernet and RS-232)
- Advanced battery management package

SPECIFICATIONS

System configurations

The EPOS Mini system may be provided in either single shelf or double shelf configurations. The single shelf configuration offers a complete DC power system including AC, battery and load distribution, fully equipped controller, and battery LVD. When selecting the double shelf configuration the output power is doubled and a further extended load distribution is provided with an optional partial load disconnect (“PLD”).

The connection of AC and batteries, together with the

controller options remains the same regardless of configuration.

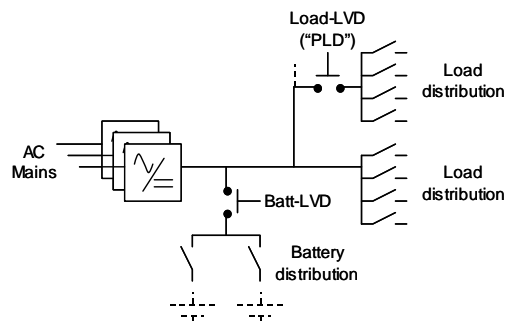
Both configurations are well suited for mounting in a standard 19” cabinet or open rack. A wall mount kit is offered as well.

Please refer to specific datasheets on Controller and Rectifier for further details and information on available options.

Description	EPOS Mini 48/60-300.4-RU	EPOS Mini 48/60-300.8-RU
Output volt min/nom/max	42/48/59 VDC // 53/60/72 VDC (nominal output voltage is set on the rectifier module)	
Output power @ nominal	1200 W	2400 W
Input current per phase Max value, 3P-N supply.	175 VAC: 3.8 A	175 VAC: 5.7 A
Rectifier	ERM 48/60-300	
Output power characteristics	Constant power	
Max number of rectifiers	4	8
Input voltage	Nominal: 230Y400NPE, Range: P-N: 175-290 VAC	
AC wiring	3NPE Terminal Block or 4p Mains MCB+PE (optional)	
Input frequency	45 – 65 Hz	
Cooling	Convection cooled	
Temperature range	Normal: -5 to +50 degC Extended: +50 to +70 degC (derated output)	
Ground reference	Positive ground	
Battery distribution	2x MCB 63A w/ auxiliary switch for alarm	
Load distribution	up to 6x 1p MCB (Legrand 1-63A)	up to 17x 1p MCB (Legrand 1-63A), w/ or w/o PLD
Low volt disconnect – Batt	Yes (optional)	
Low volt disconnect – Load	No	Single stage “PLD” (optional).
Controller	ESC MS-48.60 (standard controller) ESC MA-48.60 (advanced controller, optional)	
Enclosure	Shelf prepared for mounting on rack, cabinet or wall	
Approvals	CE, CB, RoHS	

Enclosure

Description	48/60-300.4-RU	48/60-300.8-RU
Dimensions (HxWxD)	19” (482mm) x 4U (178mm) x 290mm	19” (482mm) x 10U (445mm) x 290mm
Placement	Wall or Floor	
Cabling outlet	Through top or side (right hand)	
Options	Wall mount kit.	



PRODUCT SELECTION GUIDE

Tailor your system

EPOS Mini provides extensive possibilities in forming a system optimised to your needs. A number of pre-defined ready-to-use system configurations are available as listed

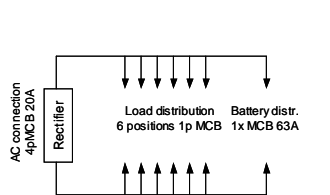
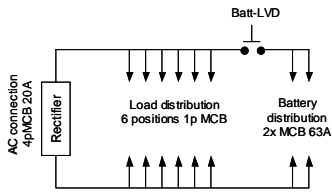
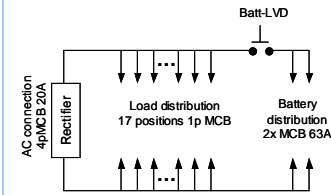
below. For further options and possibilities please contact Efore sales support.



Pre-defined System configurations

Each part no represents a complete pre-defined system configuration. The table details what equipment is included for each part no. Please note that rectifiers, accessories

and protection devices for loads are not included, and needs to be ordered separately. For factory installed options, please contact your Efore sales representative.

Description	95MA004-*	95MA002-*	95MA003-*
Configuration	EPOS Mini 48/60-300.4-RU		EPOS Mini 48/60-300.8-RU
Enclosure	19" shelf, 4U high. Prepared for cabinet mounting.		19" shelf, 10U high. Prepared for cabinet mounting.
AC connection	4p Mains MCB+PE		
Rectifier	Space for 4 rectifiers. <i>Rectifier modules not included.</i>		Space for 8 rectifiers. <i>Rectifier modules not included.</i>
Controller	ESC MS-48.60	ESC MA-48.60	ESC MA-48.60
Battery conn.	MCB: 1x 63A, breakers included	MCB: 2x 63A, breakers included	MCB: 2x 63A, breakers included
Load conn.	Space for 6x 1p MCB <i>No breakers included</i>		Space for 17x 1p MCB <i>No breakers included</i>
LVD	No	1x Batt LVD	1x Batt LVD
Accessories	Cables for battery block voltage measurement Wall mount kit		
Circuit diagram			
Factory installed options	Temp probe interface module + temp probe Partial load disconnect ("PLD") (only EPOS Mini 48/60-300.8)		

* Note, "-" to be replaced with revision letter (A,B,C,...) for a complete, valid product code.

Rectifiers

Description	Part no.	Fits
ERM 48/60-300 (48 & 60 VDC, 300 W)	92M018-*	EPOS Mini 48/60-300.4 and .8

Protection devices – Battery

Description	Part no.
MCB 63A w/ aux switch	94M257-*

Protection devices – Load

Description	Part no.	Description	Part no.
MCB 10A, C-curve	52500109	MCB 32A, C-curve	52500113
MCB 16A, C-curve	52500110	MCB 40A, C-curve	52500276
MCB 20A, C-curve	52500111	MCB 50A, C-curve	52500220
MCB 25A, C-curve	52500112	MCB 63A, C-curve	52500114

Accessories

Description	Part no.
Battery block volt meas. set 4 blocks, 5m	77CBS00340-*
Temp probe kit, 5 m	94M268-*
Wall mount kit, single shelf config	94M178-*
Wall mount kit, double shelf config	94M266-*
Rectifier cover plate kit	94M256-*

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