

Power Supply Emparro20-Advanced-3-phase

IN: 3x400 - 500VAC; OUT: 22,5 - 29V/5ADC

The Emparro20-Advanced series of three-phase DIN rail power supplies are extremely versatile and are suitable for a wide range of applications where reliable DC power is required. The high efficiency of these power supplies allows you to save on energy costs while reducing your carbon footprint. Thanks to the low heat dissipation, the service life of the power supplies is extended and the cooling requirements of your control cabinet are reduced. The switching power supply also offers a 5-second power boost, which allows the operation of capacitive and inductive loads. With a very low inrush current, the input circuit breaker is prevented from tripping. The push-in terminal technology ensures quick and easy installation of the power supply unit. The powerful overvoltage protection effectively protects the power supplies from short-term voltage spikes, which extends the service life of the power supplies and increases machine availability.

Link to Product

Illustration



Product may differ from Image



| Commercial data                            |               |
|--------------------------------------------|---------------|
| ECLASS-6.0                                 | 27049002      |
| ECLASS-6.1                                 | 27049002      |
| ECLASS-7.0                                 | 27049002      |
| ECLASS-8.0                                 | 27049002      |
| ECLASS-9.0                                 | 27040701      |
| ECLASS-10.1                                | 27040701      |
| ECLASS-11.1                                | 27040701      |
| ECLASS-12.0                                | 27040701      |
| ETIM-5.0                                   | EC002540      |
| customs tariff number                      | 85044083      |
| GTIN                                       | 4065909055632 |
| Packaging unit                             | 1             |
| Electrical data                            |               |
| Number of devices parallel connection max. | 3             |
| Number of devices series connection max.   | 20            |
| Parallel connection                        | yes           |
| Series connection                          | yes           |

Security level SELV/PELV

#### Electrical data | Supply

Power frequency 50/60 Hz

#### Electrical data | Input

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Input voltage 1 AC                  | 400 V                                |
| Input voltage 2 AC                  | 500 V                                |
| Input voltage AC min.               | 350 V                                |
| Input voltage AC max.               | 575 V                                |
| Input current at input voltage 1 AC | 0,35 A                               |
| Input current at input voltage 2 AC | 0,3 A                                |
| Phase number input                  | 3                                    |
| Efficiency                          | 91,3 % @ 400 V AC, 91,2 % @ 500 V AC |

#### Electrical data | Output

|                             |                  |
|-----------------------------|------------------|
| Output rating               | 120 W            |
| Output voltage DC           | 24 V             |
| Output voltage DC min.      | 29 V             |
| Output voltage DC max.      | 22,5 V           |
| Output current min.         | 4,1 A            |
| Output current max.         | 5,3 A            |
| Duration Power Boost min.   | 5 s              |
| Mains failure bridging min. | 20 ms @ 400 V AC |
| Mains failure bridging max. | 40 ms @ 500 V AC |
| Power Boost                 | 150 %            |
| Ripple (s-s) max.           | 10 mV            |
| Spikes (s-s) max.           | 30 mV            |

#### Diagnostics

Alarm contact yes

#### Installation | Connection

Connection Push-In spring clamp terminals

#### Device protection | Electrical

|                                     |        |
|-------------------------------------|--------|
| Installation height max. ASL        | 3000 m |
| Degree of protection (EN IEC 60529) | IP20   |
| Protection class (EN IEC 61140)     | I      |
| Overload protection output          | yes    |
| Pollution Degree                    | 2      |
| Short-circuit protection output     | yes    |
| Overtemperature protection output   | yes    |

#### Device protection | Mechanical

Cooling type Natural convection

#### Mechanical data | Material data

|                                     |           |
|-------------------------------------|-----------|
| Combustibility class housing (UL94) | V-0       |
| Conformal coated PCB                | no        |
| Material housing                    | Aluminium |

#### Mechanical data | Mounting data

|                            |                              |
|----------------------------|------------------------------|
| Net weight                 | 660 g                        |
| Mounting method            | geschnappt                   |
| Suitable for mounting type | Tragschiene TH35-7.5/TH35-15 |
| mounting position          | horizontal, vertical         |
| Height                     | 129 mm                       |
| Width                      | 55 mm                        |
| Depth                      | 138,2 mm                     |

**Environmental characteristics | Climatic**

|                                    |        |
|------------------------------------|--------|
| Ambient temperature min.           | -25 °C |
| Ambient temperature max.           | 70 °C  |
| Storage temperature min.           | -40 °C |
| Storage temperature max.           | 85 °C  |
| Relative humidity max. (operation) | 95 %   |

**Environmental product conformity**

|                       |                     |
|-----------------------|---------------------|
| REACH                 | (EC) No 1907/2006   |
| REACH-SVHC            | compliant           |
| RoHS                  | 2011/65/EU          |
| China RoHS            | compliant   EPUP 25 |
| WEEE                  | compliant           |
| Halogen-free-Material | JEDEC JS709A        |
| Pb-free-Material      | JESD97              |

**Conformity**

|    |            |
|----|------------|
| CE | 2014/30/EU |
|----|------------|

**Approvals**

|          |           |
|----------|-----------|
| UL       | E200364   |
| ULc      | E200364   |
| SEMI F47 | compliant |

**Connection type 3**

|                          |                           |
|--------------------------|---------------------------|
| Connection type 1        | Alarm                     |
| Connection type 2        | Input                     |
| Connection type 3        | Output                    |
| Connection               | Spring clamp terminals FK |
| Family construction form | terminal                  |
| Gender                   | female                    |
| Color contact carrier    | green                     |
| No. of poles             | 4                         |
| PIN 1                    | 13 3.1                    |
| PIN 2                    | 14 3.2                    |
| PIN 3                    | Inhibit + 3.3             |
| PIN 4                    | Inhibit - 3.4             |
| Connection               | Spring clamp terminals FK |
| Family construction form | terminal                  |
| Gender                   | female                    |
| Color contact carrier    | green                     |
| No. of poles             | 4                         |
| PIN 1                    | L 1 1.1                   |
| PIN 2                    | L 2 1.2                   |
| PIN 3                    | L 3 1.3                   |
| PIN 4                    | PE 1.4                    |
| Connection               | Spring clamp terminals FK |
| Family construction form | terminal                  |
| Gender                   | female                    |
| Color contact carrier    | green                     |
| No. of poles             | 4                         |
| PIN 1                    | 2.1                       |
| PIN 2                    | 2.2                       |
| PIN 3                    | 2.3                       |
| PIN 4                    | 2.4                       |