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**JUMO Process Control, Inc.**  
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# JUMO mTRON T Measurement, Control, and Automation System

## Power supply units 24 V

### Brief description

The particular features of these DIN rail power supply units are the high efficiency and the small size. These are achieved by a synchronous rectification and additional new design details.

High immunity to transients and power surges as well as low electromagnetic emission enable its use in almost every environment.

The integrated output power manager, a large input voltage range, and virtually no input inrush current guarantee easy installation and use. A diagnostic is easy due to the potential-free DC-OK contact, a green DC-OK LED, and red overload LED.

Spring-clamp terminals allow a safe and fast installation.



Type 705090/05-33



Type 705090/10-33

### Order details

(1) Basic type	
705090	Power supply unit
(2) Output	
05	5 A
10	10 A
(3) Input voltage	
33	AC 100 to 240 V +10/-15 %, 48 to 63 Hz

### Features

- AC 100 to 240 V wide-range input
- Quick-connect spring-clamp terminals
- Robust metal case
- Efficiency up to 93.5 %
- Active Power Factor Correction (PFC)
- 150 % peak load capability
- GL approval (EMC2)
- UL approval

Order code      (1)      (2)      (3)  
 Order example      705090      /      05      -      33

### Scope of delivery

1 power supply unit in the version ordered
1 instruction manual

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## Technical data (extract)

Type		705090/05-33	705090/10-33
Output voltage	nom.	DC 24 V SELV	
Adjustment range	min.	DC 24 to 28 V	
Output current continuous at DC 24 to 28 V	nom.	5 to 4.5 A	10 to 9 A
Output current for typical 4 s at DC 24 to 28 V	nom.	7.5 to 6.7 A	15 to 13.5 A
Output power continuous at DC 24 V	nom.	120 W	240 W
Output power for typical 4 s at DC 24 V	nom.	180 W	360 W
Output ripple (20 Hz to 20 MHz)	max.	50 mVpp	
Input voltage	nom.	AC 100 to 240 V +10/-15 %	AC 100 to 240 V ±15 %
Mains frequency	nom.	50 to 60 Hz ±6 %	
Input current at AC 120/230 V	typ.	1.10/0.62 A	2.22/1.22 A
Power factor at AC 120/230 V	typ.	0.99/0.91	0.98/0.92
Input inrush current at AC 120/230 V	typ.	9/11 A peak	4/7 A peak
Hold-up time at AC 120/230 V	typ.	34/65 ms	27/28 ms
Efficiency at AC 120/230 V	typ.	91.6/92.7 %	92.6/93.5 %
Power losses at AC 120/230 V	typ.	11.0/9.4 W	20.0/18.1 W
Derating from 60 °C to 70 °C	min.	3 W/°C	6 W/°C
Operational temperature range		-25 to +70 °C	
Storage temperature range		-40 to +85 °C	
Use		Indoor	
Site altitude		Up to 2000 m above sea level	
Dimensions W x H x D	nom.	40 mm x 130.5 mm x 121.5 mm	60 mm x 130.5 mm x 121.5 mm
Weight	max.	620 g	900 g

For the detailed technical data and further technical information please refer to the original manufacturer's data sheet:

Type 705090/05-33: [www.pulspower.com/pdf/qs5\\_241.pdf](http://www.pulspower.com/pdf/qs5_241.pdf)

Type 705090/10-33: [www.pulspower.com/pdf/qs10\\_241.pdf](http://www.pulspower.com/pdf/qs10_241.pdf)

## Current consumption of the individual modules of the system

Basic type	Description	Current consumption (at DC 19.2 V)
705001	Central processing unit	Max. 350 mA
705010	Multichannel controller module	Max. 300 mA
705015	Relay module 4-channel	120 mA
705020	Analog input module 4-channel	130 mA
705021	Analog input module 8-channel	80 mA
705025	Analog output module 4-channel	240 mA
705030	Digital input/output module 12-channel	90 mA
705040	Router module	100 mA
705060	Multifunction panel 840	Max. 750 mA
705065	Operating panel	Max. 750 mA