

DC/DC Ultra Wide Input Converter EQU 100 Series



- 100W Isolated Output
- Quarter-Brick Package
- 4 : 1 Input Range
- Efficiency up to 88%
- Regulated Outputs
- Continuous Short Circuit Protection
- OTP / OVP / OCP
- 1500VDC Isolation

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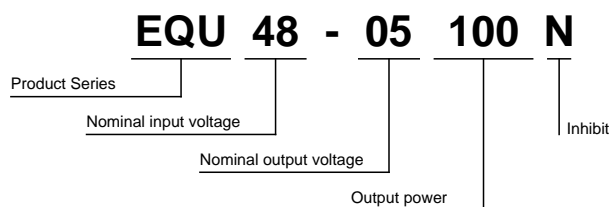
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Product Range

Typenübersicht

Sommaire des types

Model	Input		Input current @ U _{in} nom.		U _{out}	Output		Efficiency typ.
	nominal	range	full load	no load		U _{out}	power	
Single								
EQU48-3V3100	48VDC	18...72VDC	2344mA	60mA	3.3VDC	30A	99W	88%
EQU48-05100	48VDC	18...72VDC	2367mA	60mA	5.0VDC	20A	100W	88%
EQU48-12100	48VDC	18...72VDC	2358mA	30mA	12VDC	8.3A	99.6W	88%
EQU48-15100	48VDC	18...72VDC	2379mA	30mA	15VDC	6.7A	100.5W	88%
EQU48-24100	48VDC	18...72VDC	2369mA	30mA	24VDC	4.17A	100W	88%



All values refer to an ambient temperature of 25°C and nominal rated values where nothing else is specified.

Input Specifications

Characteristic		Conditions	min	typ	max	unit
U_{IN}	Input voltage		18	48	72	V
U_{UVLO}	Under voltage lockout					V
	Max. input current at full load		See	product	range	A
	No load input current		See	product	range	mA

Output Specifications

Characteristic		Conditions	min	typ	max	unit
U_{ACC}	Output voltage accuracy		±1.5			%
	Output voltage adjust		±10			%
	Line regulation				±0.2	%
	Load regulation				±0.2	%
	Load transient recovery time	25% / 100% step load change		< 500		us
	Load transient error band			±5		%
	Temperature coefficient			±0.03		%/K
	Ramp up time					ms
	Start up time					ms
	Ripple and noise	BW = 20MHz	3.3V/5V:100, 12V/15V:150, 24V:240			mVpp
	Current limit		110		160	%
	Over voltage protection		115		140	%
	Short circuit protection					%
	Short circuit characteristic		continuous			

General Specifications

Characteristic		Conditions	min	typ	max	unit
U_{ISO}	Isolation voltage	in/out, in/case, out/case	1500			V
R_{ISO}	Isolation resistance		> 10M			Ohm
R_{ISO}	Switching frequency		typ. 250			kHz
	Approvals					
	MTBF					h
	Case material		Plastic / Aluminium			

	Compound material			
	PCB material			
	Weight		ca.62	gr
	Dimensions		36.8 x 57.9 x 12.7	mm
	Soldering infos		275°C for 10	s

EMC Specifications

Characteristic	Conditions	min	typ	max	unit
EMC conducted					

Environmental Specifications

Characteristic	Conditions	min	typ	max	unit
T _{CASE} Operation temperature			-40...+100		°C
T _{AMB} Storage temperature			-40...+105		°C
T _{SD} Thermal shutdown range			Tcase = 110		°C

Own notes Eigene Notizen Vos notices

No EMC graph available yet, please contact factory

No EMC filter available yet, please contact factory

Inhibit

Inhibit

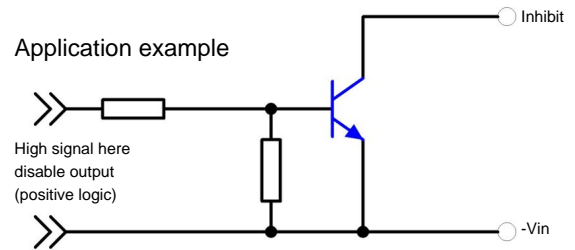
Inhibit

The EQU 100 Series allows the user to switch the module on and off electronically by inhibit on/off feature. The converters are available in "positive logic" or "negative logic" (option) versions for inhibit on/off.

Logic table

Logic state	Negative logic*	Positive logic
Logic low	Module on	Module off
Logic high	Module off	Module on

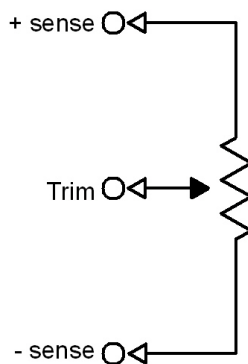
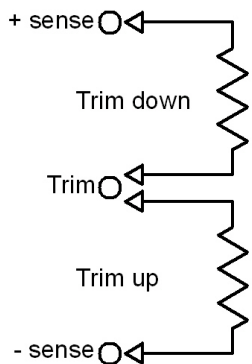
* Suffix "N" to the model number with active low inhibit on /off



Trimming

Trimmen

Ajuster



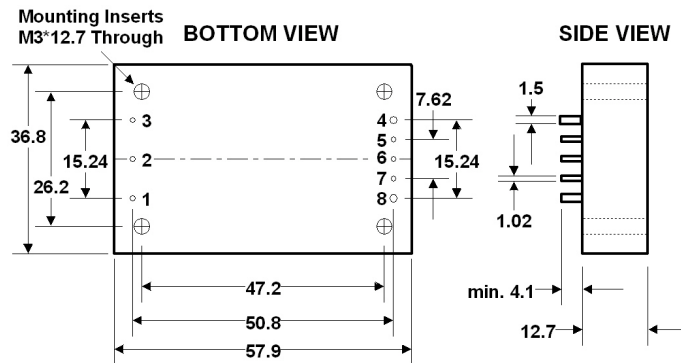
Own notes

Eigene Notizen

Vos notices

Normal tolerance 1/10 ± 0.5 mm, 1/100 ± 0.25 mm; Pin tolerance ± 0.5 mm diameter, NP = No pin, NC = Not connected

SINGLE OUTPUT



Pin	Single
1	+Vi
2	on/off
3	-Vi
4	-Vo
5	-Sense
6	Trim
7	+Sense
8	+Vo

Cleaning

Waschen

Lavage

The modules are cleanable with the today's known and in the electronics industry usually used products. Due to the different cleaning processes and new available products, we highly recommend to do a compatibility test when using the converters the first time.

Die Module sind waschbar mit den heute bekannten und in der Elektronikindustrie üblichen Reinigungsmitteln. Bedingt durch die verschiedenen Reinigungsprozesse und neu auf den Markt kommende Mittel, raten wir dringend beim Ersteinsatz der Konverter eine Verträglichkeitsprüfung vorzunehmen.

Les modules sont lavables avec les solvants couramment utilisés dans l'industrie électronique. Dû aux différents processus de lavage et aux nouveaux détergents disponibles sur le marché, il est strictement recommandé de faire un test de compatibilité avant la première utilisation.

Own notes

Eigene Notizen

Vos notices

Notice: All statements, technical information, and recommendations related to FABRIMEX's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use.

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