

72-308W Quarter Brick Converter

Features

- ◆ Standard Quarter Brick Footprint
- ◆ 18-36, 36-75VDC Inputs
- ◆ 1.2V 60A, 28V 11A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ 1500VDC Basic Isolation
- ◆ Baseplate cooling
- ◆ High operating efficiency (up to 93.5%)
- ◆ Constant switching frequency



Key Market Segments & Applications



Specifications							
Model		IQL					
Nominal Output Voltage	VDC	1.2	2.5	3.3	5	12	28
Input Voltage Range	VDC	See Model Selector					
Ripple & Noise (max)(pk-pk) (1)	mV	60	30	100	80	120	500
Line Regulation (max)	mV	1	5	6.6	10	60	100
Load Regulation (max)	mV	1	5	15	10	60	100
Overload Protection Threshold (3)	A	71	69	70	50	27.5	12.4
Overvoltage Protection (Typ) (2)	VDC	1.4	3.1	4.1	6.1	14.7	33.6
Overtemperature Protection (3)	-	Yes					
Remote Sense	-	Yes	Yes	Yes	Yes	Yes ⁽⁴⁾	Yes
Remote On / Off	-	Negative Logic (5)					
Temperature (operating)	°C	-40 to 115	-40 to 115	-40 to 125	-40 to 119	-40 to 118	-40 to 115
Temperature (storage)	°C	-55 to 125					
Humidity (operating)	-	20 to 95% (non-condensing)					
Humidity (storage)	-	10 to 95% (non-condensing)					
Cooling	-	Conduction, convection, or forced air					
Isolation Voltage	VDC	1500 Input - Output, 1500 Input - Baseplate					
Vibration (non operating)	-	5 to 50Hz@0.5g (4.9m/s ²), and 50 to 500Hz@1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4					
Shock	-	50 G at 6 ms pulse in three axes					
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805, CB scheme (IEC950), CE Mark (EN60950)					
Weight (max)	g	55g open frame, 70g with base plate					
Size	mm	57.9 x 36.8 x 13.21					
Warranty	yrs	3 Years					

(1) See website for detailed specification and test methods.

(2) Default Over Voltage Protection is Latching mode unless otherwise indicated.

(3) Over Current and Over Temperature Protection are both Non-Latching.

(4) iQL24021A120V has remote sense, iQL48025A120V does not have remote sense.

(5) Positive Logic is an option available for all codes.

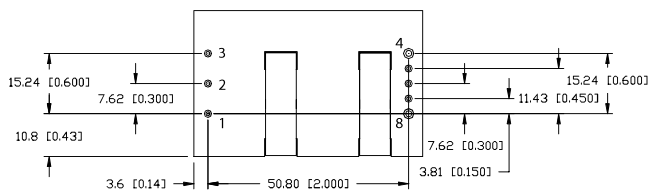
Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	Base Plate	Efficiency at Full Load (%)	Pin Length (in)
iQL48060A012V-0B3-R (6)	36 - 75	1.2	0.96 - 1.32	60	72.0	No	83.5	0.145
iQL48060A025V-0B3-R (6)	36 - 75	2.5	2.0 - 2.75	60	150.0	No	89.0	0.145
iQL48060A025V-0B9-R	36 - 75	2.5	2.0 - 2.75	60	150.0	No	89.0	0.180
iQL24050A033V-009-R	18 - 36	3.3	2.64 - 3.63	50	165.0	Yes	90.5	0.180
iQL48060A033V-003-R (6)	36 - 75	3.3	2.64 - 3.63	60	198.0	Yes	91.0	0.145
iQL48060A033V-009-R	36 - 75	3.3	2.64 - 3.63	60	198.0	Yes	91.0	0.180
iQL48060A033V-0B9-R	36 - 75	3.3	2.64 - 3.63	60	198.0	No	91.0	0.180
iQL24040A050V-001-R	18 - 36	5.0	4.0 - 5.5	40	200.0	Yes	91.0	0.145
iQL24040A050V-009-R	18 - 36	5.0	4.0 - 5.5	40	200.0	Yes	91.0	0.180
iQL48045A050V-001-R	36 - 75	5.0	4.0 - 5.5	45	225.0	Yes	91.0	0.145
iQL48045A050V-003-R (6)	36 - 75	5.0	4.0 - 5.5	45	225.0	Yes	91.0	0.145
iQL48045A050V-0B3-R (6)	36 - 75	5.0	4.0 - 5.5	45	225.0	No	91.0	0.145
iQL48045A050V-009-R	36 - 75	5.0	4.0 - 5.5	45	225.0	Yes	91.0	0.180
iQL48045A050V-0B9-R	36 - 75	5.0	4.0 - 5.5	45	225.0	No	91.0	0.180
iQL24021A120V-001-R	20 - 36	12.0	9.6 - 13.2	21	252.0	Yes	92.0	0.145
iQL24021A120V-009-R	20 - 36	12.0	9.28 - 12.76	21	252.0	Yes	92.0	0.180
iQL48025A120V-009-R	36 - 75	12.0	9.6 - 13.2	25	300.0	Yes	93.5	0.180
iQL48025A120V-0B9-R	36 - 75	12.0	9.6 - 13.2	25	300.0	No	93.5	0.180
iQL48025A120V-001-R	36 - 75	12.0	9.6 - 13.2	25	300.0	Yes	94.0	0.145
iQL48011A280V-008-R	36 - 75	28.0	22.4 - 30.8	11	308.0	Yes	92.5	0.180
iQL48011A280V-009-R	36 - 75	28.0	22.4 - 30.8	11	308.0	Yes	92.5	0.180

(6) OVP = Non-Latching Mode

Preferred Model

Recommended Footprint (Bottom View)



Pinout

PIN	Function	PIN	Function
1	Vin (+)	5	Sense (-)(if applicable)
2	On / Off	6	Trim
3	Vin (-)	7	Sense (+)(if applicable)
4	Vo (-)	8	Vo (+)

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

