

- Standard Quarter Brick Footprint
- 18-36 & 36-75VDC Inputs
- 2.5V to 28V Nominal Outputs
- Through Hole Mounting
- 1500VDC Basic Isolation
- Baseplate Cooling

iQL Series

72-308W

Quarter Brick Converter

iQL Features and Benefits

Features

- High operating efficiency (up to 94%)
- Constant switching frequency
- Baseplate

Benefits

- Reduced system heating
- Easier system filtering
- Conduction or heatsink cooling

Specifications						
MODEL		iQL				
ITEMS		2.5	3.3	5	12	28
Nominal Output Voltage	VDC					
Input Voltage Range	VDC	See Model Selector				
Ripple & Noise (max)(pk-pk) (1) mV	30	70	80	100	120	500
Line Regulation (max)	mV	5	6.6	10	60	100
Load Regulation (max)	mV	5	15	10	60	100
Overload Protection Threshold (3)	A	69	70	50	27.5	12.4
Overvoltage Protection (Typ) (2)	VDC	3.1	4.1	6.1	14.7	33.6
Overtemperature Protection (3)	-	Yes				
Remote Sense	-	Yes except 8.3V models and above				
Remote On / Off	-	Negative Logic				
Temperature (operating)	°C	-40°C to +115°C		-40°C to +125°C	-40°C to +118°C	-40°C to +115°C
Temperature (storage)	°C	-55°C to +125°C				
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	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark				
Weight (max)	g	55g open-frame, 70g with the base-plate				
Size	mm	57.9 x 36.8 x 13.21				
Warranty	yrs	3				

Notes:

- (1) See Website for detailed specifications and test methods
- (2) Latching
- (3) Non-latching

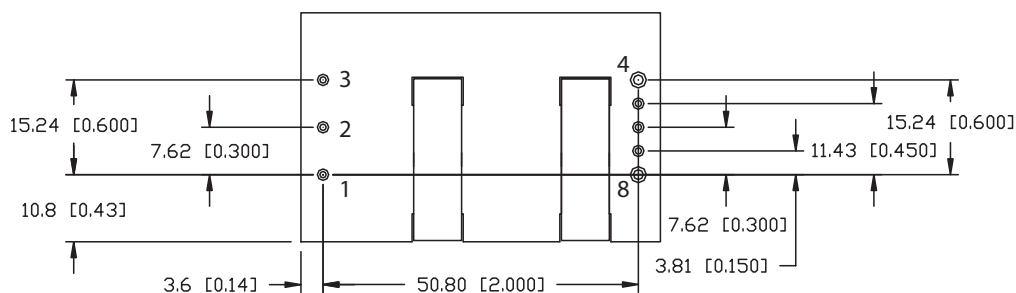
Model Selector

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)
iQL48060A025V-0B3-R (3)	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 (3)	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 (2)	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-0B3-R (3)	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 (2)	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

Preferred

Note: (2) Latching (3) Non-latching

Recommended Footprint (Top View) iQL Series



Feature Set

Feature Set	On / Off Logic	Trim Pin	Pin Length (inches)	Base Plate
00	Positive	Yes	0.145	Yes
01	Negative	Yes	0.145	Yes
08	Positive	Yes	0.180	Yes
09*	Negative	Yes	0.180	Yes
B8	Positive	Yes	0.180	No
B9*	Negative	Yes	0.180	No
L8	Positive	No	0.180	Yes
L9	Negative	No	0.180	Yes

* Preferred feature set
Model Number Example: iQL48030A096V-009-R

Pinout

PIN	Function	PIN	Function
1	Vin (+)	5	Sense (-) (if applicable-not fitted on 8.3V or above)
2	On / Off	6	Trim
3	Vin (-)	7	Sense (+) (if applicable-not fitted on 8.3V or above)
4	Vo (-)	8	Vo (+)



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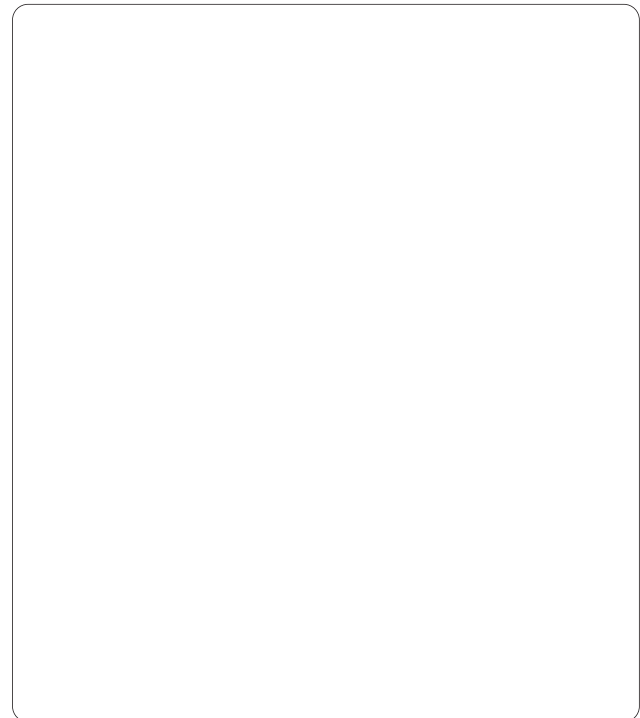
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