



PCB MOUNT



Encapsulated AC-DC Converter

Type	Series	Power (W)	Input Voltage (Vac)	Output Voltage (V)	Package	EMC		Isolated Voltage	Operating Temp.	Efficiency (Max.)
						Class A	Class B			
AC-DC	A03-XE1-XX	3	90-264	3.3, 5, 6, 12, 15, 24	SIP	•	•	3.75K Vac	-25°C to +85°C	81,0%
AC-DC	A06-XE2-XX	6	90-264	3.3, 5, 12, 24	DIP	•	•	3.75K Vac	-25°C to +85°C	80,0%
AC-DC	A10-XE2-XX	10	90-264	3.3, 5, 12, 24	DIP	•	•	3.75K Vac	-20°C to +85°C	80,0%
AC-DC	A20-XE2-XX	20	90-264	5, 12, 15, 24	DIP	•	•	3K Vac	-30°C to +75°C	85,0%

Open Frame AC-DC Converter

Type	Series	Power (W)	Input Voltage (Vac)	Output Voltage (V)	Package	EMC		Isolated Voltage	Operating Temp.	Efficiency (Max.)
						Class A	Class B			
AC-DC	A05-XA02-XX	5	90-264	5, 12	Open Frame	•	•	3K Vac	0°C to +70°C	74,0%
AC-DC	A10-XA04-XX	10	90-264	3.3, 5, 12, 24	Open Frame	•	•	3.75K Vac	-25°C to +80°C	80,0%
AC-DC	A20-XA05-XX	20	90-264	12, 24	Open Frame	•	•	3K Vac	-25°C to +75°C	86,0%

DC-DC Converter (Industrial)

Type	Series	Power (W)	Input Voltage Nominal/Range (Vdc)	Output Voltage (V)	Package	Function				Isolated Voltage	Operating Temp.	Efficiency (Max.)
						SCP	OLP	CTRL	Trim			
DC-DC	D03-DF2-XX	3	4.5-9 18-36	5	DIP	•	•			2K Vdc	-40°C to +105°C	81,5%
DC-DC	D03-DA4-XX	3	24 / 9-36 48 / 18-75	5, 9, 12, 15	1x1" Package	•	•			1.6K Vdc	-40°C to +100°C	82,0%
DC-DC	D06-DA4-XX	6	24 / 9-36 48 / 18-75	5, 9, 12, 15	1x1" Package	•	•			1.6K Vdc	-40°C to +95°C	82,0%
DC-DC	D10-(2)DA4-XX	10	24 / 9-36 48 / 18-75	5, 12, ±12, 15, ±15, 24	1x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	88,5%
DC-DC	D15-(2)DA4-XX	15	24 / 9-36 48 / 18-75	3.3, 5, 12, ±12, 15, ±15, 24	1x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	89,5%
DC-DC	D30-(2)DA4-XX	30	24 / 9-36 48 / 18-75	3.3, 5, 12, ±12, 15, ±15, 24	1x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	92,0%
DC-DC	D40-DA4-XX	40	24 / 9-36 48 / 18-75	3.3, 5, 12, 15, 24	1x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	90,0%
DC-DC	D24-DB4-XX	24	24 / 9-36 48 / 18-75	24	2x1" Package	•	•	•		3K Vdc	-40°C to +85°C	86,0%
DC-DC	D40-(2)DB4-XX	40	24 / 9-36 48 / 18-75	3.3, 5, 12, ±12, 15, ±15	2x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	92,0%
DC-DC	D60-(2)DB4-XX	60	24 / 9-36 48 / 18-75	3.3, 5, 12, ±12, 15, ±15, ±24	2x1" Package	•	•	•	•	1.6K Vdc	-40°C to +105°C	91,5%
DC-DC	D150-BH8-XX	150	48 / 9-75	12, 24, 28, 48, 54	Half Brick	•	•	•	•	3K Vdc	-40°C to +110°C	89,0%

DC-DC Converter (Medical)

Type	Series	Power (W)	Input Voltage Nominal/Range (Vdc)	Output Voltage (V)	Package	Function				Isolated Voltage	Operating Temp.	Efficiency (Max.)
						SCP	OLP	CTRL	2MOPP			
DC-DC	D04M-DF2-XX	4	5 / 4.5-9 12 / 9-18 24 / 9-36	5, 12, 15, 24	DIP	•	•		•	5K Vac	-40°C to +100°C	83,0%
DC-DC	D06M-DF4-XX	6	24 / 9-36 48 / 18-75	5, 12, 15, 24	DIP	•	•		•	5K Vac	-40°C to +105°C	88,0%
DC-DC	D11M-DF4-XX	11	24 / 9-36 48 / 18-75	5, 12, 15, 24	DIP	•	•		•	5K Vac	-40°C to +105°C	88,0%
DC-DC	D20M-DB2-XX	20	12 / 9-18 24 / 9-36 48 / 18-75	5, 12, 15, 24	2x1" Package	•	•		•	5K Vac	-40°C to +100°C	90,0%

Railway

Type	Series	Power (W)	Input Voltage (Vac)	Output Voltage (V)	Package	Function				Isolated Voltage	Operating Temp.	Efficiency (Max.)
						SCP	OLP	CTRL	Trim			
AC-DC	A03-XA01-3.3	3	90-264 Vac 130-370 Vdc	3,3	DIP	•	•			3K Vac	-40°C to +85°C	70,0%
DC-DC	D50-BQ4-XX	50	9-36 Vdc	5, 12, 24	Quarter Brick	•	•	•	•	3K Vdc	-40°C to +110°C	90,5%
DC-DC	D50-BQ8-XX	50	16.8-137.5 Vdc	12, 24	Quarter Brick	•	•	•	•	3K Vdc	-40°C to +110°C	88,0%
DC-DC	D60-BQ12-XX	60	14-160 Vdc	12, 24, 48, 54	Quarter Brick	•	•	•	•	3K Vdc	-40°C to +110°C	89,0%



Series Name	Input	Output	Output Type	Power (Watt)	Operating temperature (°C) ***	Isolation	Bauform
HS1 **	3.3/5/12	3.3/5/9/12/15	S	0.50	-40 / - / 105	3kV	SIP4
HD1 **	3.3/5/12	3.3/5/9/12/15	S	0.50	-40 / - / 105	3kV	DIP8
HS2 **	3.3/5/12/15/24/48	3.3/5/9/12/15/24	S	1,0	-40 / - / 105	1.5kV	SIP7
HD2 **	3.3/5/12/15/24/48	3.3/5/9/12/15/24	S	1,0	-40 / - / 105	2.0kV	DIP14
HS3-single **	3.3/5/12/15/24	3.3/5/9/12/15/24	S	1,0	-40 / - / 105	3kV	SIP7
HS3-dual **	5/12/15/24/48	±5/±9/±12/±15/±24	D	1,0	-40 / - / 105	3kV	SIP7
HD3-single **	3.3/5/12/15/24/48	3.3/5/9/12/15/24	S	1,0	-40 / - / 105	3kV	
HD3-dual **	5/15/15/24/48	±5/±9/±12/±15/±24	D	1,0	-40 / - / 105	3kV	SIP7
HS4-single **	3.3/5/12/15/24/48	3.3/5/9/12/15/24	S	2,0	-40 / - / 105	3kV	SIP7
HS4-dual **	5/12/15/24/48	±5/±9/±12/±15/±24	D	2,0	-40 / - / 105	3kV	SIP7
HD4-single **	3.3/5/12/24/48	3.3/5/9/12/15/24	S	2,0	-40 / - / 105	3kV	DIP
HD4-dual **	5/15/15/24/48	±5/±9/±12/±15/±24	D	2,0	-40 / - / 105	3kV	
HS5-single **	3,3/5/12/15/24	3,3/5/9/12/15/24	SR	1,0	-40 / - / 105	3kV	SIP8
HS6-single	4,5-9/18-36/36-72	5/9/12/15/24	SR	1,0	-40 / - / 105	1,5kV	SIP8
HS6-dual	4,5-9/18-36/36-72	±5/±9/±12/±15/±24	DR	1,0	-40 / - / 105	1,5kV	
HS7-single	4,5-9/18-36/36-72	5/9/12/15/24	SR	2,0	-40 / - / 105	1,5kV	SIP8
HS7-dual	4,5-9/18-36/36-72	±5/±9/±12/±15/±24	DR	2,0	-40 / - / 105	1,5kV	SIP8
HM1 **	3.3/5/12/15/24	3.3/5/9/12/15	S	0.50	-40 / - / 105	3kV	DIP8
HM2 **	3.3/5/12/15/24	3.3/5/9/12/15	S	1,0	-40 / - / 105	3kV	DIP8
HM3-dual **	3.3/5/12/15/24	±3.3/5/±9/±12/±15	D	1,0	-40 / - / 105	3kV	DIP10
HM3-single **	3.3/5/12/15/24	3.3/5/9/12/15	S	1,0	-40 / - / 105	3kV	DIP10
HM4-dual **	5/12/24/	±3.3/5/±9/±12/±15	D	1,0	-40 / - / 105	3kV	DIP12
HM4-single **	3.3/5/12/24	3.3/5/9/12/15	S	1,0	-40 / - / 105	3kV	DIP12
HM5-dual **	5/12/24/	±3.3/5/±9/±12/±15	D	1,0	-40 / - / 105	3kV	DIP12
HM5-single **	3.3/5/12/24	3.3/5/9/12/15	S	1,0	-40 / - / 105	3kV	DIP12

*** Derating if the temperature is ≥85°C (Min. / Typ. / Max.) (°C)
 ** Continuous Short Circuit Protection

Series Name	Input	Output	Output Type	Power (Watt)	Hersteller	Isolation	Pinning	CSCP=
HM2-xyy5/D	03	03	S	05	Z	05	F	Continuous Short Circuit Protection N