

DIMENSION

A New World of Power

DIN-Rail DC Power Supplies



Q-Series

- 80W 1-ph 32mm
- 120W 1-ph 40mm
- 240W 1-ph 60mm
- 480W 3-ph 65mm

AMAZINGLY SMALL

- Up to 55% savings in panel space
- Unmatched efficiency up to 95%

RELIABLE

- Active filtering of input transients
- Full output power up to +60°C
- MTBF > 600 000h, specified capacitor lifetime > 50,000h
- Short-term operation down to 60Vac and up to 300Vac
- 3 year extended warranty

EASY

- 100-240V wide-range input
- Extra low inrush current
- Intelligent output power manager
- Quick-connect spring clamp terminals

POWERFUL

- 150% peak load capability up to +60°C
- Large output capacitors

ADDITIONAL FEATURES

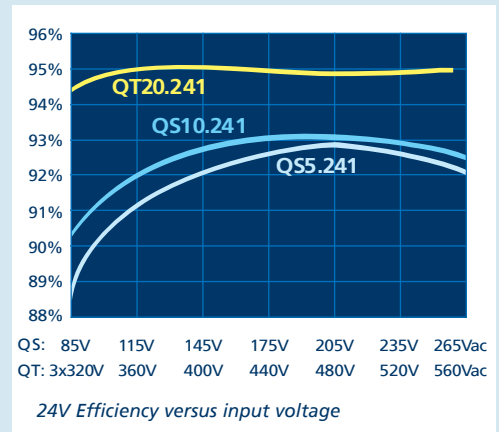
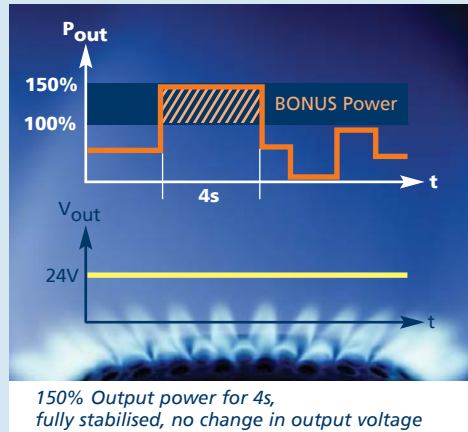
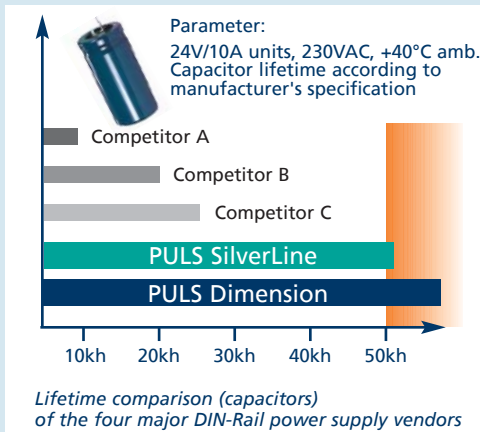
- Power factor 0.9 even for 3-phase input
- DC-OK relay contact
- -25°C to +60°C operation, no derating
- DC input from 88V to 370V
- Output voltages: 12V, **24V**, 36V & 48V

CIRCLE OF INNOVATION

Q-Series	QS3		QS5		QS10			QT20		
	24V 3.4A		24V 5A		24V 10A	12V 15A	48V 5A	24V 20A	36V 13A	48V 10A
Output Voltage	24-28V		24-28V		24-28V	12-15V	48-56V	24-28V	36-42V	48-55V
Output Current continuous	3.4-3A		5-4.5A		10-9A	15-12A	5-4.3A	20-17.5A	13.3-11.4A	10-8.7A
typ. 4s	5-4.5A		7.5-6.7A		15-13.5A	22.5-18A	7.5-6.5A	30-26A	20-17.1A	15-13A
Output Power continuous	80W		120W		240W	180W	240W	480W	480W	480W
typ. 4s	120W		180W		360W	270W	360W	720W	720W	720W
Ripple & Noise (20MHz) max.	100mV _{pp}		50mV _{pp}		50mV _{pp}	50mV _{pp}	100mV _{pp}	100mV _{pp}	150mV _{pp}	100mV _{pp}
Efficiency 120V (400V) typ.	88.7%		91.6%		92.3%	91.6%	91.2%	95.0%	94.8%	95.4%
Efficiency 230V (480V) typ.	90.0%		92.7%		93.0%	91.8%	92.0%	94.8%	94.6%	95.0%
Losses 120V (3x400V) typ.	10.4W		11.0W		20W	16.6W	23.2W	25.3W	26.3W	23.1W
Losses 230V (3x480V) typ.	9.1W		9.4W		18.1W	16.1W	20.9W	26.4W	27.4W	25.3W
AC Input Voltage nom.	100-240V ±15%		100-240V -15/+10%		100-240V ±15%			3x 380-480V ±15%		
AC Input shortterm	60-85Vac < 200ms 276-300Vac < 500ms		60-85Vac < 200ms 264-300Vac < 500ms		60-85Vac < 200ms 276-300Vac < 500ms			280-323Vac < 200ms -		
Power Factor (100-240V)	0.56-0.47		0.99-0.91		0.98-0.92			0.94		
Hold-up Time (100-240V)	27-174ms		34-65ms		27ms	27ms	36ms	22ms		
DC Input Voltage	110-300V -20/+25%		110-300V ±20%		110-300V -20/+25%			consult factory		
Capacitor's Lifetime min. ¹⁾	70 000h		89 000h		57 000h	>50 000h	81 000h	51 000h	51 000h	51 000h
Dimensions (WxHxD)	32 x 124 x 102mm		40 x 124 x 117mm		60 x 124 x 117mm			65 x 124 x 127mm		
Weight	420g / 0.9lb		620g / 1.4lb		900g / 2.0lb			870g / 1.9lb		
Order Number	QS3.241		QS5.241		QS10.241	QS10.121	QS10.481	QT20.241	QT20.361	QT20.481

¹⁾ at 230Vac or 3x400Vac, +40°C, nominal load and according to the specification of the capacitor's manufacturer
All parameters not specifically mentioned are defined at 230Vac or 3x400Vac, full load and +25°C of ambient temperature.

Operational Temperature	-25 to +70°C,	Approvals Industrial Control Equipment Information Technology Equipment Hazardous Location Class I Div 2 Marine EPRI Sag Immunity Fulfilled Standards CE (EMC+LVD) EMC Immunity EMC Emission Input Harmonics (PFC) Flicker	UL 508 Listed IEC 60950-1 (CB Scheme), UL 60950-1 UL 1604 Germanischer Lloyd GL SEMI F47 PQ-Star EN 60204-1, EN 50178 EN 61131-2, EN 61558-2-17 89/336/EEC, 73/23/EEC EN 61000-6-2 EN 61000-6-3, EN 55022 Class B, FCC Part 15 Class B EN 61000-3-2 EN 61000-3-3
Output Derating 60 to 70°C	2.5% / °C		
Inrush Current	significantly reduced		
Parallel Use	yes, up to 3 units without limitations		
Serial Use	yes, max output voltage 150Vdc		
DC-ok Relay Contact (not QS3)	60V 0.3A / 30V 1A		
Terminals	Quick-connect spring clamp terminal		
Wire Gauge max.	6mm ² solid, 4mm ² stranded, 10 AWG Output QS3, QS5: 4mm ² solid, 2.5mm ² stranded, 12 AWG		
Accessories			
Wall Mounting Adapter	ZM1.WALL		
Decoupling Module	YR2.Diode (for redundancy, ...)		
Buffer Unit	SLV20.200 (24V outputs)		



The information presented in this document is believed to be accurate and reliable and may be changed without notice

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