



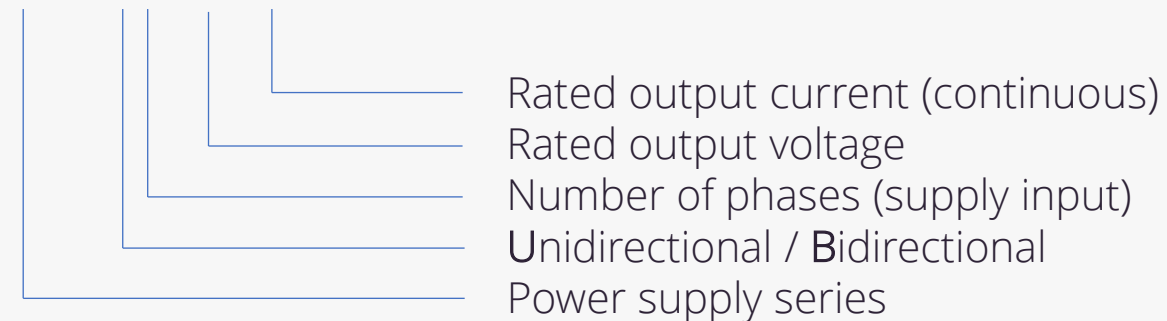
With the Quasar B1-400/6, Prodrive Technologies offers a matching supply for the Cygnus D3-400/4 and S3-400/8 series of servo drives.

Quasar power supplies are available with single phase or 3-phase power inputs and feature an integrated power factor correction circuit. The integrated power factor correction circuit precisely regulates the output voltage, therefore isolating the potentially unstable mains voltage from the drives and guarantying maximum performance. Unlike conventional rectifier-based drive systems, peak forces can still be delivered at high velocities, even with long cables or low mains voltages.

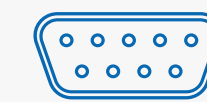
In addition to its integrated power factor correction circuit, select models in the Quasar series are capable of bidirectional power flow, increasing overall efficiency and saving cost on external brake resistors.

All Quasar power supplies are equipped with a CAN-interface which directly interfaces with our intelligent drives or motion controllers. Using this interface, critical parameters such is input/output voltages and currents can be monitored and alarms can be set to perform specific actions when the mains voltage reaches a predefined level.

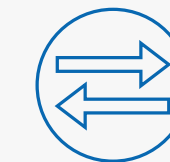
Quasar B1-400/6



High peak power



CAN interface for remote diagnostics



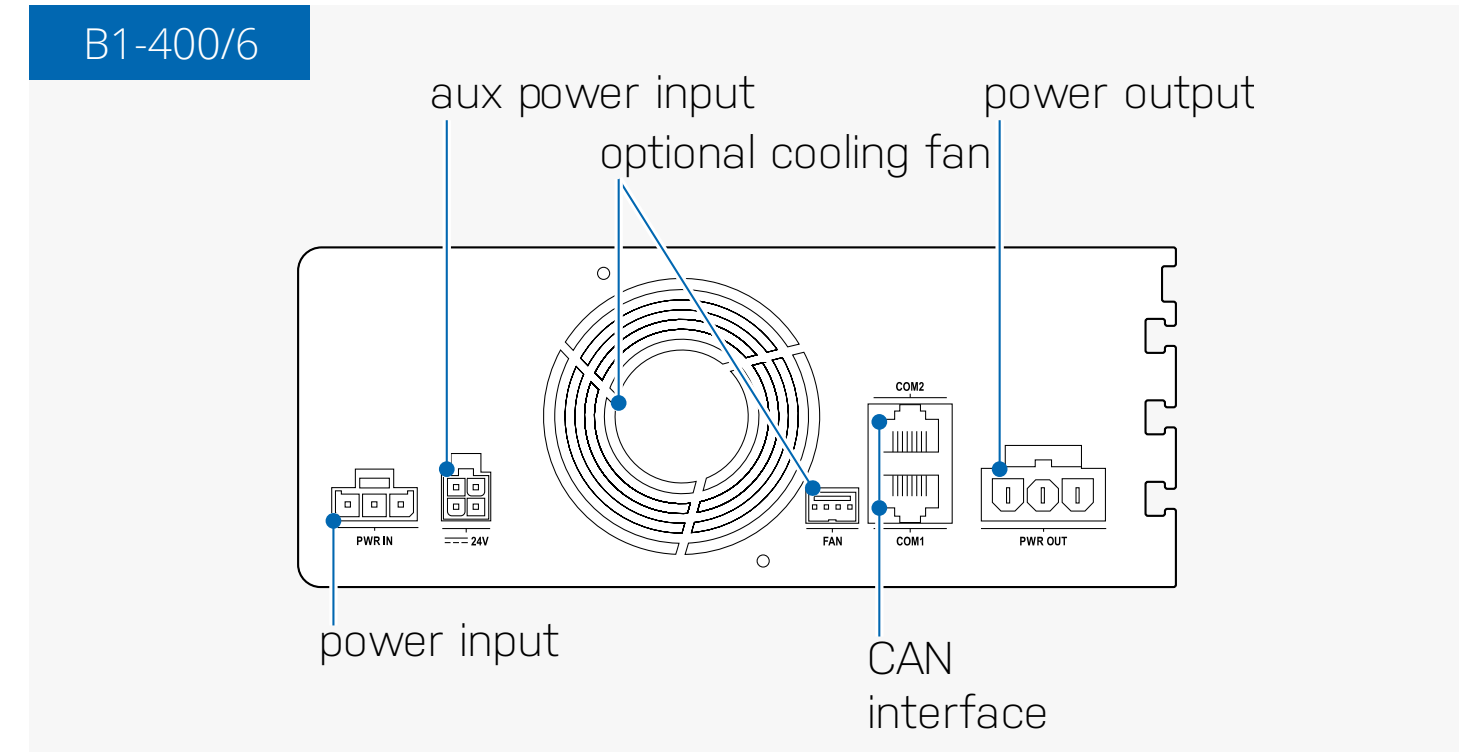
High efficiency & Bidirectional



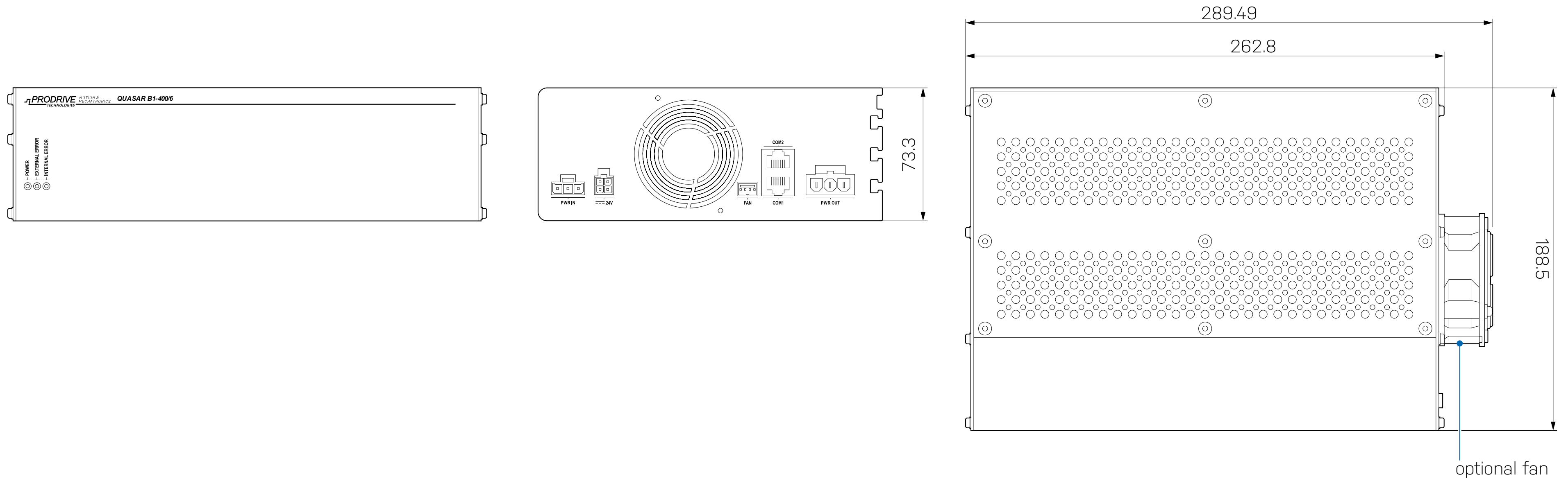
Universal input voltage range

QUASAR LINE – INTERFACES & MECHANICAL SPECIFICATIONS

	Parameter	Symbol	Unit	B1-400/6	Remark
Input	Supply input voltage	V_{SUPPLY}	V	85-265	
	Supply input voltage, abs. max	$V_{SUPPLY_ABS_MAX}$	V_{AC}	280	
	Peak input current	I_{SUPPLY_PEAK}	A_{PK}	52	
	Continuous input current	I_{SUPPLY_CONT}	A_{RMS}	15	
	Mains frequency	f_{MAINS}	Hz	50/60	
	Power factor	PF	Hz	min 0.9	$P_{OUT} > 10\%$ of $P_{OUT,MAX,CONT}$
	Auxiliary input voltage	V_{SUPPLY_AUX}	V_{DC}	21-26	
	Auxiliary input current	I_{AUX_RMS}	A_{RMS}	max 3	
Output	Number of outputs	n_{OUT}	-	1	
	Average output voltage	V_{OUT}	V_{DC}	390-410	
	Ripple & Noise	V_{RIPPLE}	V_{PKPK}	max 20	@ $P_{OUT}=2.4kW$
				max 60	@ $P_{OUT}=7.2kW$
	Output current	I_{OUT}	A	6	
	Output current, peak	I_{OUT_PK}	A_{PK}	18	
	Load regulation	V_{OUT_REG}	-	max $\pm 10\%$	max 50W/ms
Efficiency	η_{MAX}	-	>90%	at maximum load	
Diagnostics	Interface	-	-	CAN V2.0A	
	Applicable standard	-	-		
	Device profile	-	-	CiA 453	
	Bit rate	-	Mbps	up to 1	



QUASAR LINE – INTERFACES & MECHANICAL SPECIFICATIONS



	Parameter	Symbol	Unit	B1-400/6	Remark
Safety	Applicable standard		-	IEC61800-5-1	
	Pollution degree	PD	-	2	
	Overtoltage category	OVC	-	3	
	IP-protection class / enclosure type		-	20 / open type	
	Max operating altitude	h_{OP_max}	m	2000	above mean sea level
EMC	Applicable standard			IEC61800-3	
	Classification		-	Cat C2, 2nd env	

	Parameter	Symbol	Unit	B1-400/6	Remark
Mechanical	Width	d_W	mm	73	
	Depth	d_D	mm	195	
	Height	d_H	mm	265	
	Operating temperature range	T_{OP}	°C	5-45	
	Storage temperature range	T_{STOR}	°C	-20-70	
	Operating humidity range	h_{OP}	%	0-95%	non-condensing
	Shock & Vibration		-	IEC60068-2-6	
	Lifetime	-	year	>10	
	Mass	mass	kg	3.6	typical value