



ALTERNATOR PROW18 500DC

DC BRUSHLESS WELDER

Technical Data Sheet

PROW18 500DC

COMMON DATA

Rated Power at 50Hz	kVA	16	
Rated Power at 60Hz	kVA	19.2	
Rated Power Factor		0.8	
Nominal Temperature	°C	40	
Control System		self excited	
Execution		brushless	
Insulation Class		H	
Protection		IP23	
Maximum Overspeed	rpm	2250	
Overload		110% of rated power for one hour in a cycle of 6 hours	
Air Flow Requirement	m ³ /min	6.9 at 50Hz	7.1 at 60Hz
R.F.I. Suppression		Standard EN55011	

REGULATION DATA

Regulation		CS18 and HVR11	
Sensing		SINGLE-PHASE	
Voltage Regulation		±1%	

ALTERNATOR TECHNICAL CHARACTERISTICS

Rotor Winding		with damping cage	
Number of Leads of Stator		4	
Stator Winding Resistance	Ω	0.64 at 20°C	
Rotor Winding Resistance	Ω	2.9 at 20°C	
Exciter Stator Resistance	Ω	15 at 20°C	
Exciter Rotor Resistance	Ω	0.72 at 20°C	

STANDARD

References		EN60034-1 ISO8528-3 EN55011	
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WELDER TECHNICAL CHARACTERISTICS

No load voltage	V_{AC}	72
Welding voltage	V_{AC}	20-40
Regulation range	A_{AC}	35-500
Max. current at 35%	A_{AC}	500
Max. current at 60%	A_{AC}	390
Max. current at 100%	A_{AC}	300
Stator Winding Resistance	Ω	0.0078 at 20°C
Electrodes type		basic; cellulosic; inox; rutile
Electrodes diameter	mm	1-8

MECHANICAL DATA

Bearing non drive end			6307-2RS-C3
Bearing drive end (B3/B14 form)			6309-2RS-C3
Weight of generator	in B2	kg	226
	in B3/B14	kg	228
	in B3/B9	kg	\

MOMENT OF INERZIA

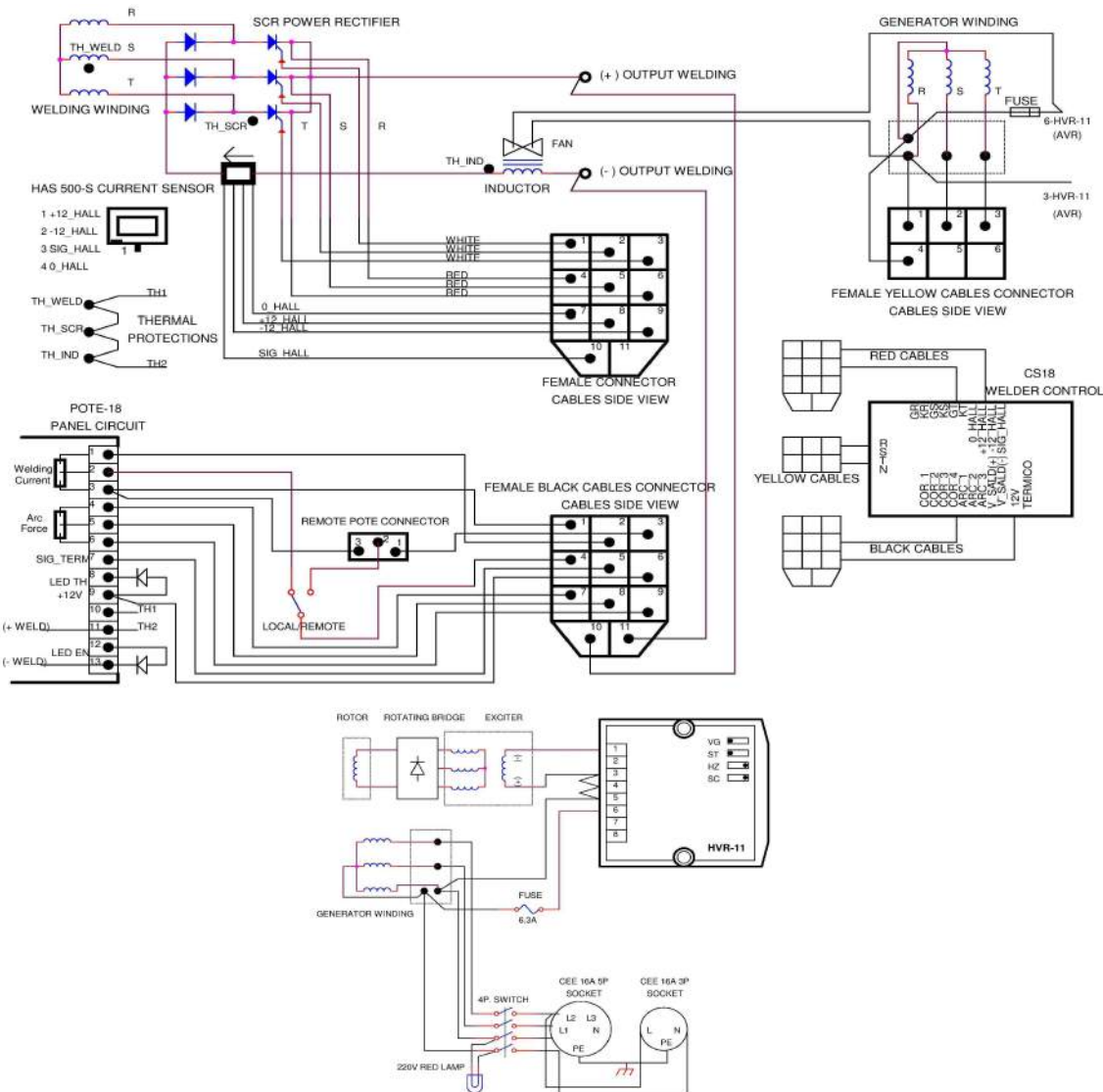
B3/B9	$kg \cdot m^2$	\
SAE 7½	$kg \cdot m^2$	0.281
SAE 8	$kg \cdot m^2$	0.29
SAE 10	$kg \cdot m^2$	0.306
SAE 11½	$kg \cdot m^2$	0.326
SAE 14	$kg \cdot m^2$	\
SAE 18	$kg \cdot m^2$	\
B3/B14	$kg \cdot m^2$	0.272

PROW18 500DC

POWER VARIATION ACCORDING TO TEMPERATURE AND ALTITUDE

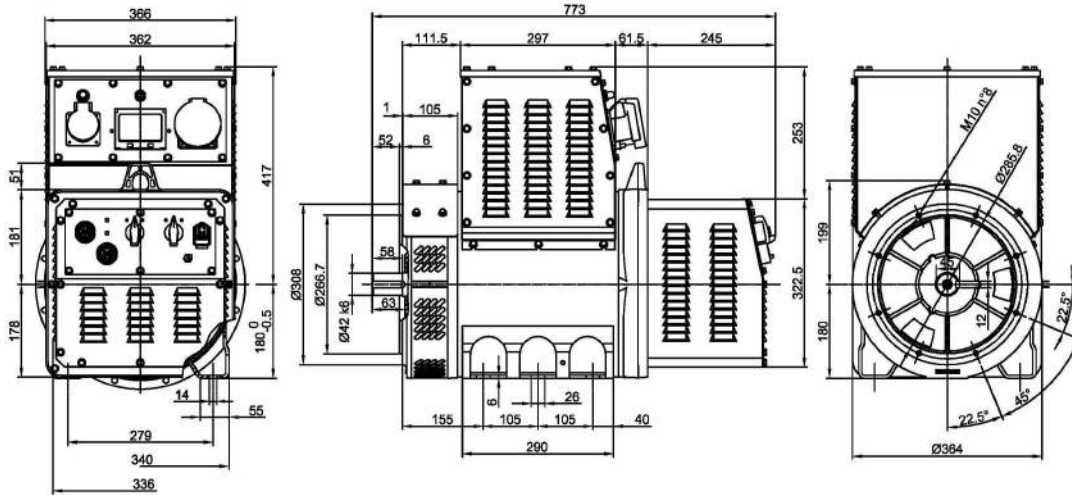
Altitude	Ambient temperature				
	25°C	40°C	45°C	50°C	55°C
< 1000m	1.09	1	0.96	0.93	0.91
1000m - 1500m	1.01	0.96	0.92	0.89	0.87
1500m - 2000m	0.96	0.91	0.87	0.84	0.83
2000m - 3000m	0.9	0.85	0.81	0.78	0.76

WIRING DIAGRAM

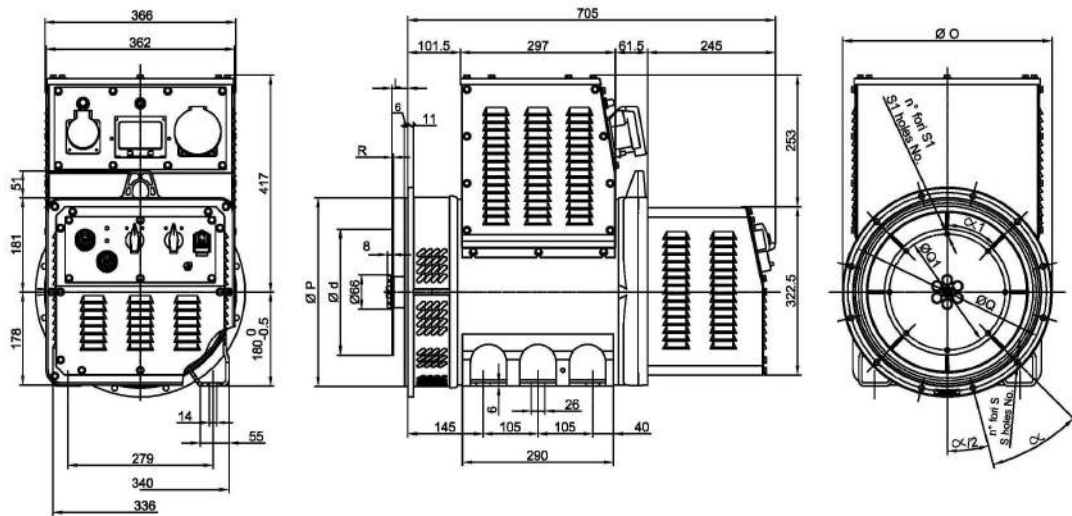


PROW18 500DC

FORMA FORM B3/B14



FORMA FORM SAE



SAE N.	FLANGIE - FLANGES - BRIDAS					
	Ø O	Ø P	Ø Q	n. fori holes No.	S	CX
5	356	314.3	333.4	8	11	45°
4	402	362	381	12		30°
3	451	409.6	428.6	12		30°
2	490	447.7	466.7	12		30°

SAE N.	GIUNTI A DISCO - COUPLING DISCS - DISCOS						
	L	Ø d	Ø Q1	n. fori holes No.	S1	CX1	R
6 1/2	30.2	215.9	200	8	9	60°	
7 1/2	30.2	241.3	222.25	8	9	45°	3
8	62	263.52	244.47	8	10.5	60	
10	63.8	314.32	295.27	8	10.5	45°	
11 1/2	39.6	352.42	333.37	8	10.5	45°	