8. TECHNICAL SPECIFICATIONS

8.1 READINGS ON GAUGES

Gauge		*Reading*	*Unit*
Ammeter L1 (P1)		Below max. rating	A
Ammeter L2 (P2)		Below max. rating	A
Ammeter L3 (P3)		Below max. rating	A
Voltmeter (P4)		Below max. rating	V
Frequencymeter (P5)	50 Hz:	Between 50 and 52.5	Hz
	60 Hz:	Between 60 and 62.5	Hz
Hourmeter (P6)		Adding up	h
Fuel level (P7)		Above 0	Fuel tank full

8.2 SETTINGS OF SWITCHES

Switch	*Function*	*Activates at*
Engine oil pressure	shut down	0.5 bar
Engine coolant temperature	shut down	105 °C

8.3 SPECIFICATIONS OF THE ENGINE/ALTERNATOR/UNIT

		50 Hz	*60 Hz*
Reference values	Absolute air inlet pressure	100 kPa	100 kPa
	Air inlet temperature	25 °C	25 °C
	Relative air humidity	30 %	30 %
	Generator load	Continuous	Continuous
Limitations without derating	Maximum ambient temperature	40 °C	40 °C
	Maximum altitude	1000 m	1000 m
	Maximum relative air humidity	85 %	85 %
	Minimum starting temperature	-18 °C	-18 °C
Engine	Type PERKINS	1004-G	1004-G
	Rated net output	42 kW	47 kW
	Load speed	1500 rpm	1800 rpm
	Electrical system	12 Vdc	12 Vdc
	Battery	12 V / 66 Ah	12 V / 66 Ah
	Oil circuit capacity	8 l	8 l
	Cooling circuit capacity	21 l	21 l
	Fuel tank capacity	175 l	175 l
	Fuse F4	10 A	10 A
	Fuel consumption at full load/no load	9.2/1.9 kg/h	10.9/2.3 kg/h
	Fuel autonomy at full load	16 h	13.5 h
Alternator	Type	IEC 34-1	IEC 34-1
	Rated output, class H temp. rise	60 kVA	68 kVA
	Rated voltage 3ph line to line higher voltage	400 V	440 V
	Frequency	50 Hz	60 Hz
	Speed	1500 rpm	1800 rpm
	Power factor	0.8	0.8
	Number of phases	3 + neutral	3 + neutral
	Winding connections	Star	Star
	Insulation armature winding, class	H	H
	Insulation field winding, class	H	H
	Sensitivity of earth leak detector	30 mA	30 mA
	Maximum diffusion resistance of earthing rod	1 kΩ	1 kΩ
	Setting of Q1	63 A	63 A
	Fuses F1, F3	4 A	4 A
QAS48 Pd(S) IT:	Sensitivity of insulation monitoring relay	10 .... 100 kΩ	10 .... 100 kΩ
Unit	Dimensions (L x W x H)	2562 x 1031 x 1307 mm	2562 x 1031 x 1307mm
	Weight net mass	1305 kg	1305 kg
	Weight wet mass	1562 kg	1562 kg

8.4 SPECIFICATIONS OF THE OPTIONS

8.4.1 Specifications of the sockets option

Setting of circuit breaker Q4	32 A	32 A
Setting of circuit breaker Q5	16 A	16 A
Setting of circuit breaker Q6	16 A	16 A

8.4.2 Low voltage option

Rated voltage 3ph line to line lower voltage	230 V	220 V
Setting of Q1	100 A	140 A

8.4.3 Dual voltage option

Rated voltage 3ph line to line higher voltage	400 V	-
Rated voltage 3ph line to line lower voltage	230 V	-
Setting of circuit breaker Q1.1	100 A	-
Setting of circuit breaker Q1.2	63 A	-

8.4.4 Triple voltage option

Rated voltage 3ph line to line higher voltage	-	440 V
Rated voltage 3ph line to line lower voltage	-	220 V
Rated voltage 1ph line to line	-	220 V
Setting of circuit breaker Q1.1	-	142 A
Setting of circuit breaker Q1.2	-	63 A

8.4.5 Triple voltage/dual frequency option

Rated voltage 3ph line to line higher voltage	400 V	440 V
Rated voltage 3ph line to line lower voltage	230 V	220 V
Rated voltage 1ph line to line	-	220 V
Setting of circuit breaker Q1.1	100 A	100 A
Setting of circuit breaker Q1.2	63 A	63 A

8.4.6 Dual frequency

Frequency	50/60 Hz	50/60 Hz

8.4.7 1 Phase

Rated voltage 1ph	-	220 V
Setting of Q1	-	190 A

8.5 CONVERSION LIST OF SI UNITS INTO BRITISH UNITS

1 bar	=	14.504 psi	1 m	=	3.281 ft
1 g	=	0.035 oz	1 mm	=	0.039 in
1 kg	=	2.205 lb	1 m^3/min	=	35.315 cfm
1 km/h	=	0.621 mile/h	1 mbar	=	0.401 in wc
1 kW	=	1.341 hp (UK and US)	1 N	=	0.225 lbf
1 l	=	0.264 US gal	1 Nm	=	0.738 lbf.ft
1 l	=	0.220 lmp gal (UK)	$t_{°F}$	=	$32 + (1.8 \times t_{°C})$
1 l	=	0.035 cu.ft	$t_{°C}$	=	$(t_{°F} - 32)/1.8$

– A temperature difference of 1°C = a temperature difference of 1.8 °F.