



ENDRESS

Power Generators

ESE 590 VW/AS

Order No. **87523049**

Main features

Max. Output [LTP] [kVA/kW]	669/535,2
Prime power (PRP) [kVA/kW]	637,07/509,66
Nominal voltage [V]	480/277
Frequency [Hz]	60
Nominal current 3~ (PRP) [A]	804,68
Power factor cos (phi)	0,8
Main circuit breaker [Pole]	4

Measures and weight

Dimensions L x W x H [mm]	4400 x 1560 x 2250
Weight in kg ca.	4888
Fuel tank capacity [l]	636

Autonomy

Running time @ 75% PRP [h]	6,5
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Noise level

Sound power level LWA [db(A)]	106
Sound pressure level LPA (7 m) [db(A)]	75

Installation data

Total air flow [m ³ /min]	46
Exhaust gas flow @ LTP [m ³ /min]	115
Exhaust gas temperature @ LTP [°C]	505
Maximum back pressure [kPa]	10

Technical data and illustrations are not binding. We assume no liability for misprints.

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ENDRESS Elektrogerätebau GmbH
 Neckartenzlinger Str. 39
 D - 72658 Bempflingen, Germany

Phone.: +49 (0) 7123-9737-0
 Fax.: +49 (0) 7123-9737-50
www.endress-generators.de



Motor	
Brand	Volvo
Model	TAD1642GE_60
Emission regulation	Tier II
Nr. of cylinder and disposition	6
Cooling system	Water-cooled
Displacement [ccm]	16120
Stroke [mm]	144 x 165
Compression rate	16.5:1
Engine output (COP) [kW]	440,8
Engine output (PRP) [kW]	551
Engine output (LTP) [kW]	604
CO2 emissions [g / kWh]	k.A.
RPM [U/min]	1800
RPM regulation	Electronic
Starting system	Electric starter
Electric circuit [V]	24
Battery [Ah]	180
Fuel	Diesel
Specific fuel consumption @ 75% PRP [g/kWh]	197
Oil capacity [L]	48
Coolant capacity [L]	93
Lube oil consumption @ PRP (max) [%]	0,1
Starting engine capability [kW]	7

LTP - Limited Power in continuous service as ISO 8528-1:2005. It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 h of operation per year (whose no more than 300 for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

PRP - Power in continuous service as ISO 8528-1:2005. It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output over 24h of operation shall not exceed 70 % of the prime power.

COP - Base load (continuous) service as ISO 8528-1:2005. It is defined as being the maximum power which the generating set is capable of delivering continuously whilst supplying a constant electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. A 10% overload capacity is available for a period of 1 hour within a 12-hour period of operation.

Ratings definition (ISO-8528)

ESP - Emergency Standby Power: It is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP.

This CO2 measurement results from testing over a fixed test cycle under laboratory conditions a(n) (parent) engine representative of the engine type (engine family) and shall not imply or express any guarantee of the performance of a particular engine' of the performance of a particular engine'.

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Generator	
Brand	MeccAlte ECO40-1L/4
Alternator type	synchron
Insulation class	Klasse H
Voltage regulation	electronic
Protection Class [IP]	23
Poles	4
Frequency [Hz]	60
Frequency tolerance [%]	±1
Voltage tolerance [%]	1
Power factor cos (phi)	0,8
Efficiency @ 75% load [%]	96
Standard AVR	DSR
THD full load LL/LN [%]	2,5 / 2,5
THD no load LL/LN [%]	2,3 / 2,4
THF [%]	<2
Short Circuit Current Capacity [%]	>300

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