



PMG-I 1ph

Permanent Magnet Generator + Single-phase AC Inverter + Actuator Kit

PMG-I

This **variable speed system** consists of a PMG (Permanent Magnet Generator) with PT100, a single-phase inverter (with **AC output** and EMC filter included) and a linear actuator to regulate the engine revolutions.

Adaptable to the engine models and interfacing with the control units by all the main brands, **PMG-I** represents a highly customizable solution for a compact and efficient AC generating set.

Plus the advantage of having **NSM** as your sole partner for a complete and fully integrated ready-to-use system.

The main objective of the **PMG-I** is to produce electrical energy with constant frequency and voltage, independently from the type of load ($\cos\phi$) and the engine speed.

Possibility to adjust the revolutions by means of:

- our actuator (with mechanical adjustment)
- 0-5V / 0-10V analogue output for electronic governor
- RS485 (MODBUS) - RS232 (MODBUS) - CANBUS protocol (electronic governor)

Firmware and parameters can be updated via USB (or our programmer, in any case necessary to update parameters).

Technical characteristics

Standard voltage

50Hz: 100±240Vac*

60Hz: 100±240Vac*

*set with programmer or USB

rpm Range (see data chart) every PMG is made to work within a single rpm range

Insulation class H

Protection IP 21 (PMG)

IP 1X (inverter 6kVA-10kVA)

T.H.D. < 2% (110-130Vac)

< 2% (220-240Vac)

Voltage accuracy ± 0,5%

Frequency ± 0,1Hz

Communication ports CANBUS / RS485 (MODBUS) / RS232 (MODBUS)

Operating temperature -10° C / +40° C

Safety features:

- Output short circuit protection
- Input and output overload protection
- Thermal protection**
- Under and over-voltage input and output protection
- Automatic max output current derating in function of the temperature

**either on PMG (PT100) and inverter

Customizable I/O available

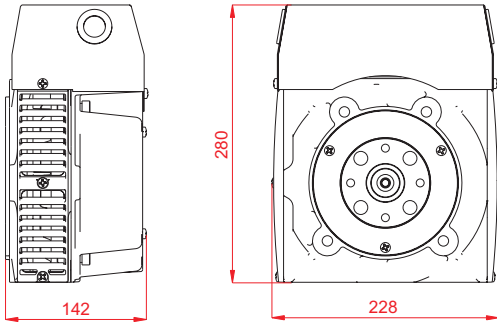
Advanced diagnostic functions

Model	Output Power [kVA]	Efficiency (PMG + inverter) η%	rpm Range [rpm]	Weight			
				cone [kg]	SAE [kg]	Inverter [kg]	Actuator [kg]
PMG-I 1ph 150SC	6,0	0,87	2000 ÷ 3000 2400 ÷ 3600	11,5	---	10,0	1,6
PMG-I 1ph 185SC	10,0	0,87	2000 ÷ 3000 2400 ÷ 3600	16,5	15,5	10,0	1,6
PMG-I 1ph 185SF	10,0	0,88	1700 ÷ 2400 1900 ÷ 2700	20,5	19,5	10,0	1,6

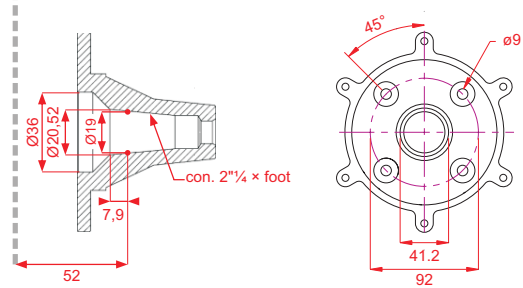
Overall Dimensions

CONE

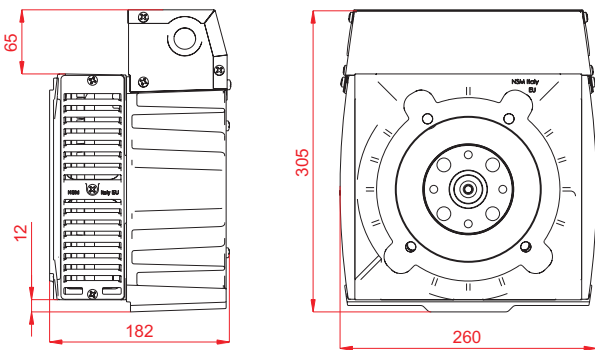
PMG 150



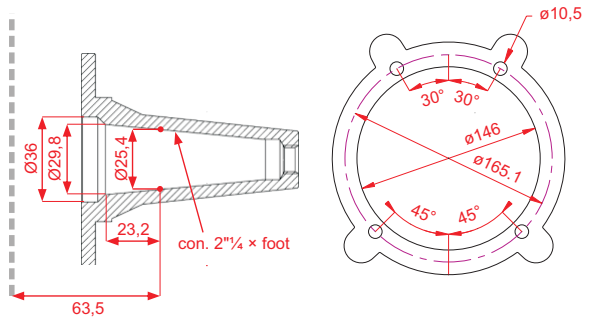
J609a C 19



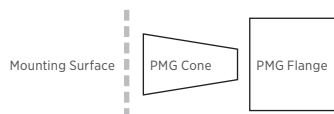
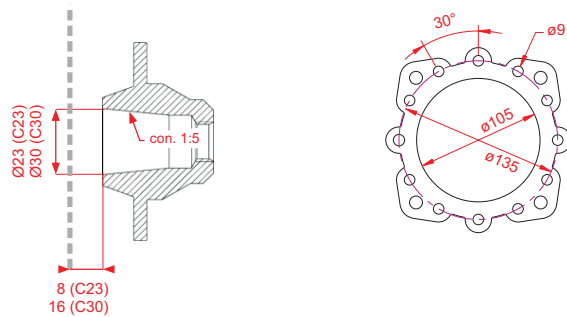
PMG 185



J609b C 25,4 C 35



C 23 C 30

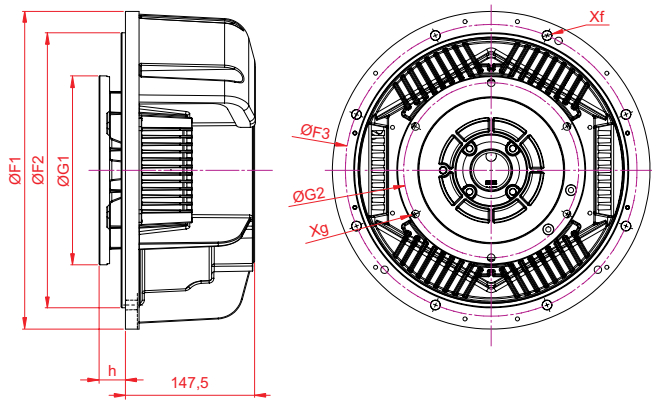


Cone	J609a	J609b	C 23	C 30
PMG 150	x	x	x	
PMG 185		x	x	x

Overall Dimensions

SAE

PMG 185

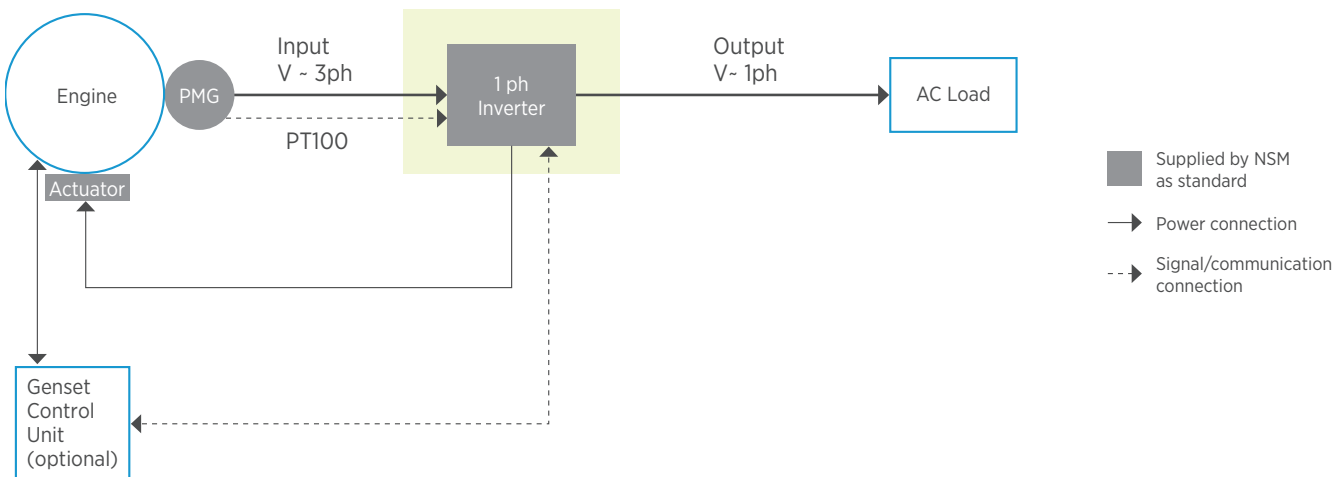


SAE	Flange			
	ØF1	ØF2	ØF3	Xf
	[mm]			
5	363	314,33	333,4	Ø11 (8)
4	403	361,95	381,0	Ø11 (12)

SAE	Joint			
	ØG1	ØG2	h	Xg
	[mm]			
6,5	215,9	200,02	30,2	Ø9 (6)
7,5	241,3	222,25	30,2	Ø9 (8)

Block Diagram

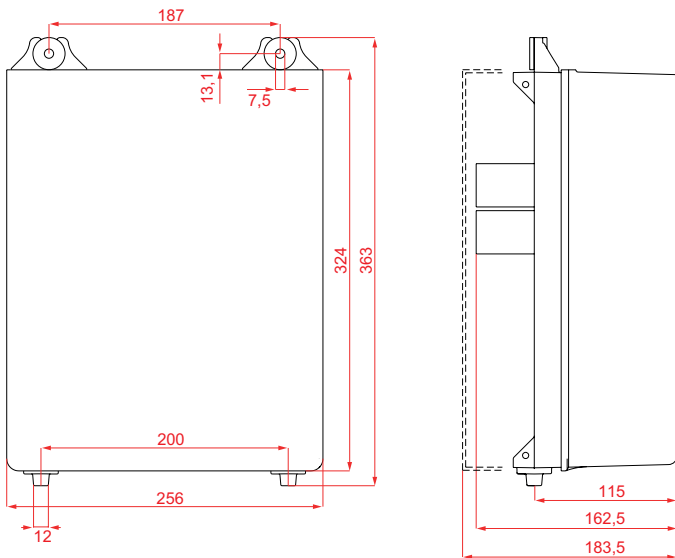
PMG-I 1ph



Overall Dimensions

Inverter

6kVA - 10kVA



Linear Actuator

