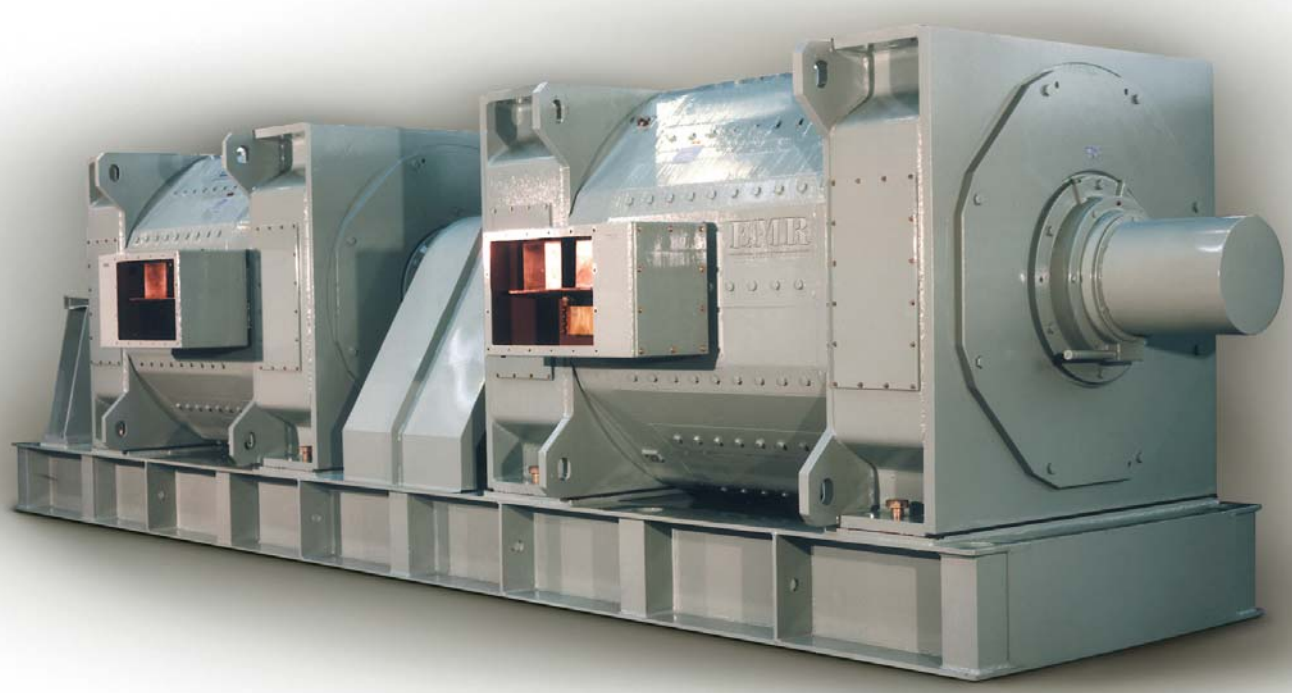
Ansaldo Sistemi Industriali

Series DH/GH
DC Motors



General information

The direct current machines manufactured by Ansaldo Sistemi Industriali in the plant of Monfalcone represent the highest quality level available today for this product.
This result is achieved by using the most modern FEM based design criteria, along with selected materials and advanced technology.
These machines provide excellent performance and commutation characteristics over a very wide range of speeds. In addition, their modular structure provides flexibility and adaptability to specific application requirements and permits easy handling, installation and maintenance.
The laminated frame motor series covers a large of power outputs, from 2 kW to about 5000 kW. It foresees 22 different shaft centre heights -from 80 mm to 1120 mm each of which is available in several frame lenghts.
These motors have been carefully designed to guarantee perfect operation even when supplied by static converters.

Cooling methods

Direct current machines are usually cooled by a top mounted blower unit, fitted with a filtre (IC 06 according to IEC).
Upon request, the machines may be supplied either with an air-to-water heat exchanger (IC 86 W) or with separate ventilation from air ducts (IC 37), with the same ratings listed in the catalogue.
All machines are also available, after derating the power output, with an air-to-air heat exchanger (IC 666).
Smaller sizes can also be supplied totally enclosed not ventilated (IC 410).

High power machines

The machines in this power range cover ratings from 350 kW to 5000 kW on the following shaft heights:
500, 560, 630, 710, 800, 900 and 1120 mm.
They represent the best solution to satisfy the variable speed applications of the largest and most important industrial processes.
These machines are designed for supply voltage in the range 400 V to 1000 V from static converters.
Sizes 500, 560 and 630 have 6 poles, sizes 710, 800, 900 have 8 poles while size 1120 is 10 pole design.
All machines are provided with compensating windings and they can therefore successfuly operate in any heavyduty application.

Medium power machines

The machines in this power range cover ratings from 30 kW to 1100 kW on the following shaft heights:
200, 225, 250, 280, 315, 400 e 450 mm.
Their main characteristic consists in a lower maximum speed. In particular, they are suitable to operate in a large speed range at constant power, also at a very low base speed.
Standard supply voltages are 220 V up to 400 V from static converter.
All sizes have 4 poles. Size 250, 280, 315, 355, 400 and 450 machines are provided with

IEC ISO NEMA CSA IQNet AD IEEE NFPA

The Electric Motors and Generators Business Unit is certified

ISO 9001 ISO 14001

Power rating:
2 - 6,000 kW (at 150 r/min in tandem)

Voltage:
up to 1,000 V

Type of cooling:
IC 06, IC 00, IC 666,
IC 86 W, IC 37, IC 17

Mass:
100 - 110,000 kg

Frame size:
80 - 1120 mm

Main features

- Fully laminated stator
- High commutating capacity during current transients
- High-speed response
- High efficiency
- Design and performance in compliance with IEC Standard
- Dynamic balancing in compliance with ISO 1940 Standard and IEC Standard
- Noise level according to IEC Standard
- High material and component reliability
- Bearings especially designed for heavy-duty service
- All machines equipped with constant pressure radial brush holders.

compensating windings as a standard, while sizes 200 and 225 may be supplied with these windings upon request.

Low power machines

The machines in this power range cover ratings from 2 kW to 160 kW on the following shaft heights:
80, 90, 100, 112, 132, 160, and 180 mm.
Their design allows high maximum running speed and in particular, with regard to industrial operating machinery, they meet all variable speed application requirements.
Standard supply voltages are 160 V up to 600 V from static converters.
Sizes 80 and 90 have 2 poles, while sizes from 100 to 180 are 4 pole designs.
Size 132, 160 and 180 machines can be designed either with or without compensating windings.

TYPE	POWER OUTPUT [kW]	TORQUE [Nm]	MASS [kg]	INERTIA [kgm²]
GH132 S	19	121	150	0.080
M	24	153	166	0.114
L	31	197	184	0.160
P	35	223	203	0.214
GH160 S	33	210	230	0.22
M	41	261	275	0.26
L	53	337	295	0.31
X	57	363	310	0.36
GH180 S	61	388	375	0.50
M	78	497	410	0.58
L	90	573	465	0.65
P	107	681	510	0.75
GH200 S	103	656	515	0.93
M	125	796	560	1.00
L	143	910	600	1.13
X	155	987	700	1.32
GH225 M	187	1190	850	1.95
L	213	1356	920	2.20
P	237	1509	1000	2.40
X	278	1770	1090	2.60
GH250 M	290	1846	1060	3.37
L	328	2088	1140	3.73
X	360	2292	1240	4.20

TYPE	POWER OUTPUT [kW]	TORQUE [Nm]	MASS [kg]	INERTIA [kgm²]
GH280 S	202	2572	1400	4.9
M	225	2865	1480	5.6
L	257	3272	1560	6.1
P	283	3603	1650	6.8
GH315 M	270	3438	2100	9.2
L	300	3820	2250	10.4
P	335	4265	2550	11.5
X	368	4686	2800	12.7
GH355 S	410	5220	2900	15.0
M	460	5857	3050	16.5
L	520	6621	3300	18.8
P	590	7512	3600	21.0
GH400 M	630	8021	3650	31.5
L	700	8913	3950	34.5
P	800	10186	4300	38.5
GH450 M	820	10441	4990	38.0
L	910	11587	5250	43.0
P	1030	13115	5550	49.0
X	1100	14006	5920	55.0
Y	1220	15534	6350	62.0

For further information contact: **Ansaldo Sistemi Industriali S.p.A. - Motors, Generators & Drives** Via Marconi 1 - 34074 Monfalcone (GO) Phone +39.0481.717.111 Fax +39.0481.717.330