

Compact  
permanent magnet generators

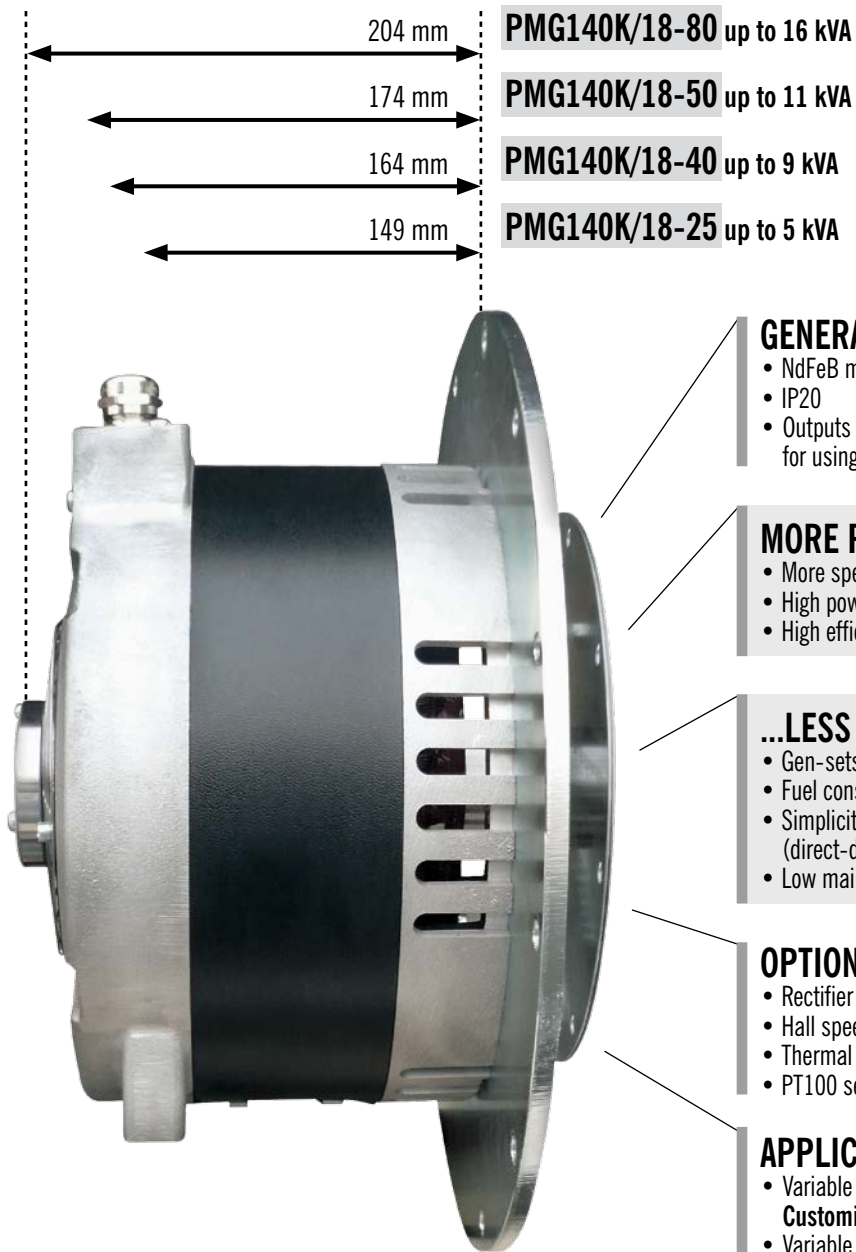


PMg

 **sincro**<sup>®</sup>

# PMG140K

## COMPACT PERMANENT MAGNET GENERATORS FOR VARIABLE SPEED



**PMG140K/18-80** up to 16 kVA

**PMG140K/18-50** up to 11 kVA

**PMG140K/18-40** up to 9 kVA

**PMG140K/18-25** up to 5 kVA

@ 3000 rpm

### GENERAL FEATURES

- NdFeB magnets, radial flux, 18 poles
- IP20
- Outputs in AC/3-phase (F class), adaptable for using with AC/AC or AC/DC converter

### MORE POWER...

- More speed = more power (variable speed)
- High power on weight ratio
- High efficiency



### ...LESS COSTS!

- Gen-sets can be more compact, smaller, lighter
- Fuel consumption can be reduced
- Simplicity in construction and assembling (direct-drive engine coupling)
- Low maintenance

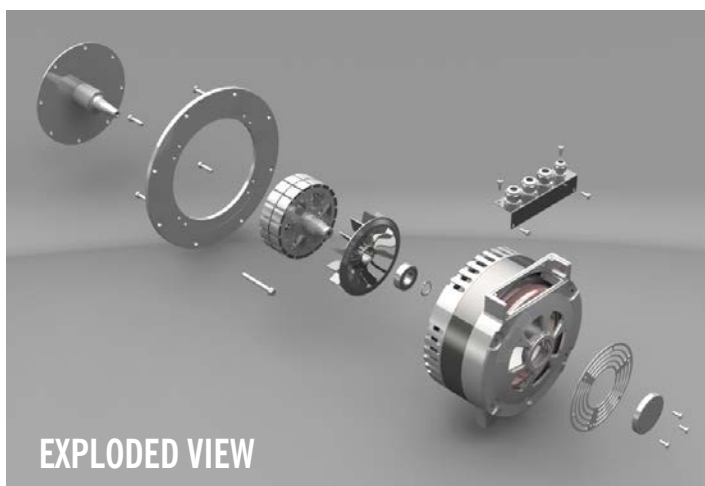


### OPTIONALS & ACCESSORIES

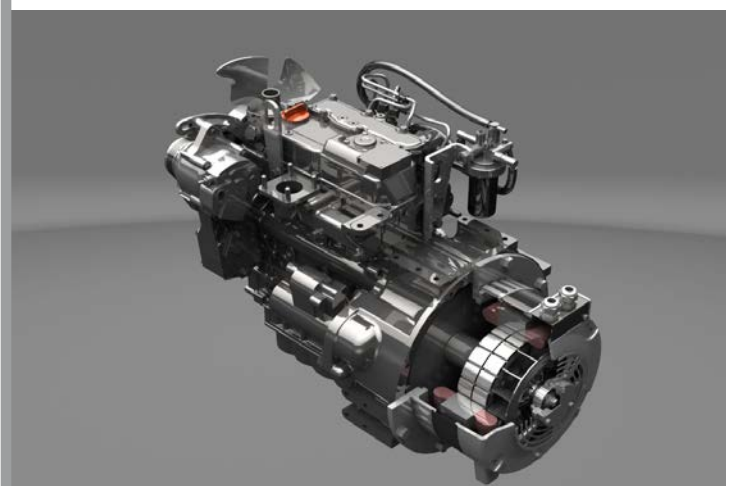
- Rectifier bridge (loose)
- Hall speed sensors
- Thermal sensors
- PT100 sensors

### APPLICATIONS

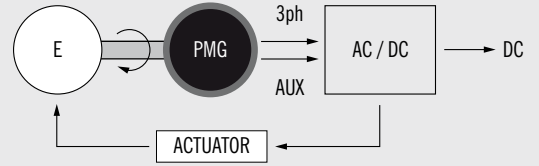
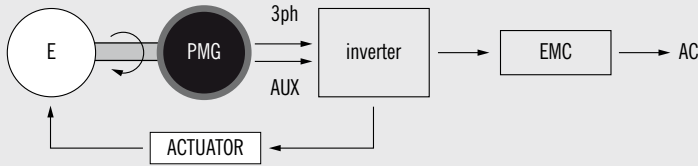
- Variable speed (medium/high) **1000 ÷ 3600 rpm**  
**Customized speeds on request**
- Variable speed generating sets and DC generators, coupled to endothermic engines (examples: lighting towers, APU, military, marine, hybrid systems)



EXPLODED VIEW



## TYPICAL APPLICATIONS BLOCK DIAGRAMS



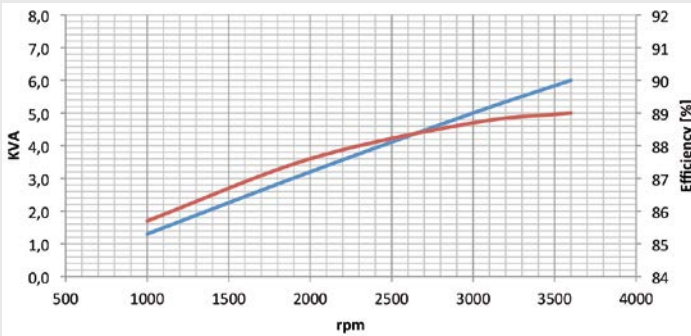
 Supplied by SOGA

For DC outputs: power derating of approx. 15%

## POWER & EFFICIENCY CURVES 3ph load, power factor 1, voltage drop no load - full load = 20%

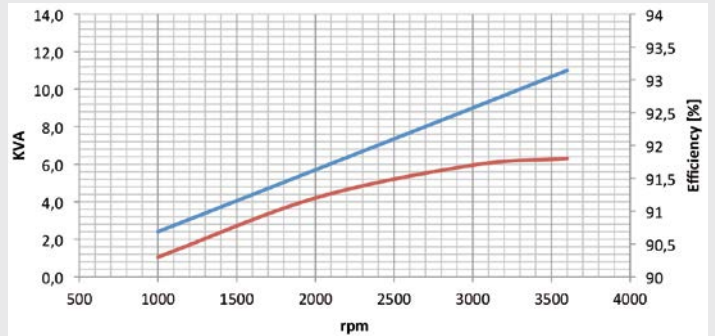
— Power AC KVA — Efficiency %

**PMG140K/18-25**



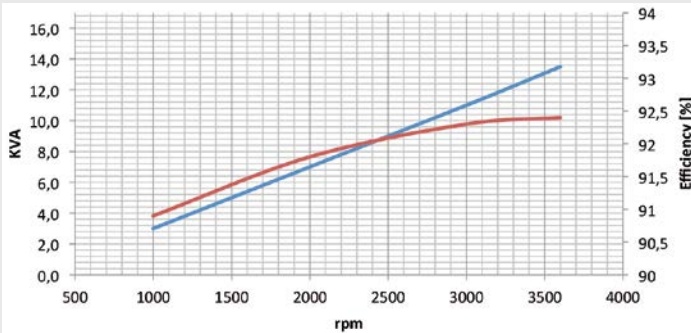
RPM	power AC	efficiency
	KVA	%
1000	1,3	85,7
2000	3,2	87,6
3000	5	88,7
3600	6	89

**PMG140K/18-40**



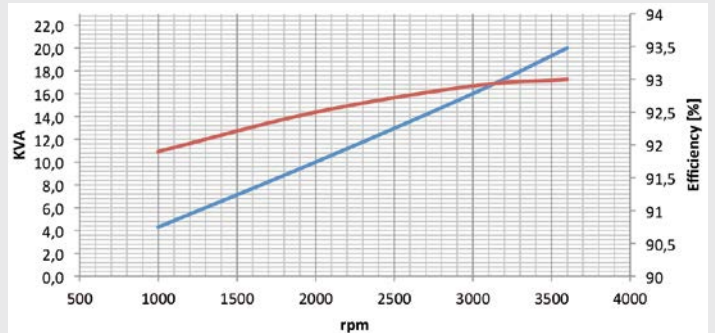
RPM	power AC	efficiency
	KVA	%
1000	2,4	90,3
2000	5,7	91,2
3000	9	91,7
3600	11	91,8

**PMG140K/18-50**



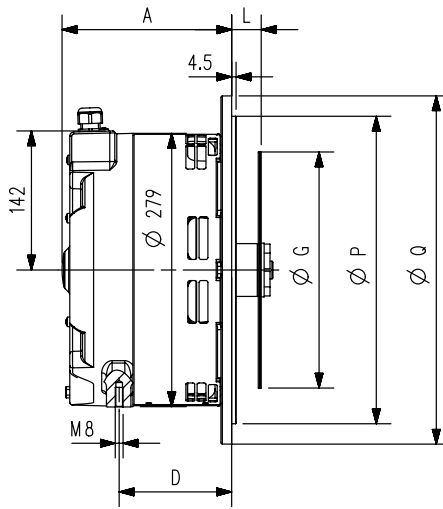
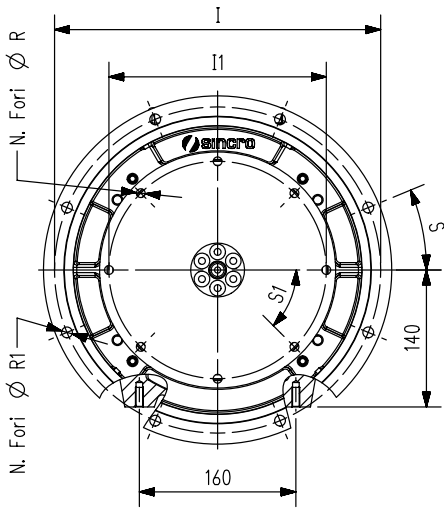
RPM	power AC	efficiency
	KVA	%
1000	3	90,9
2000	7	91,8
3000	11	92,3
3600	13,5	92,4

**PMG140K/18-80**



RPM	power AC	efficiency
	KVA	%
1000	4,3	91,9
2000	10	92,5
3000	16	92,9
3600	20	93

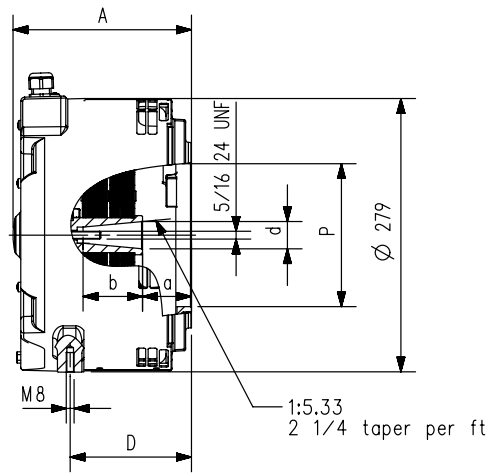
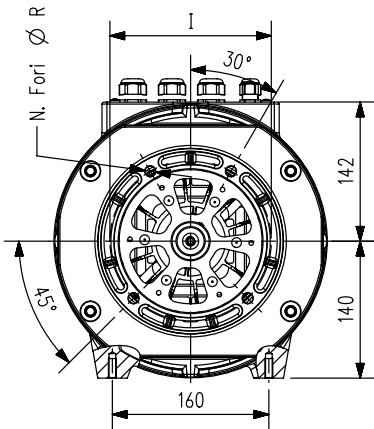
# OVERALL DIMENSIONS



## SAE

DISK JOINT	FLANGE		G	I1	L	R	HOLES	S1
	5	4						
6,5	•	•	215,9	200	30,2	9	6	60°
7,5	•	•	241,3	222,2	30,2	9	8	45°
8	•	•	263,5	244,5	62	11	6	60°
10	•	•	314,3	295,3	53,8	11	8	45°
P	314,3	362						
Q	358	405						
I	333,4	381						
S	22°30'	15°						
R1	11	11						
holes	8	12						

model	A [mm]	D [mm]	weight [kg]
PMG140K/18-25	149	90	18,4
PMG140K/18-40	164	105	21
PMG140K/18-50	174	115	23,8
PMG140K/18-80	204	145	32,1



## J609b

shaft			
cone	d	a	b
25,4	25,4	63,5	48
35	27,9	50	60,8

flange			
I	p	holes	R
165	146,1	4	11
197	163,6	4	11
197	177,8	4	11

model	A [mm]	D [mm]	weight [kg]
PMG140K/18-25	158	99	15,5
PMG140K/18-40	173	114	18,4
PMG140K/18-50	183	124	20,9
PMG140K/18-80	213	154	29,2



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