



THREE PHASE GENERATOR

EG 66 ...
EG 67 ...
EG 71.3.2/..
40066000

The three-phase Generators generate a three phase voltage which is sinusoidal and proportional to the speed or - by a built-in 3 phase Rectifier - a DC voltage. The polarity of the generated DC voltage depends not on the direction of rotation of the driving motor. Due to the very low ripple of the output DC voltage, they are mainly used for connection to speed control devices.

Mechanical features EG 66 ..., EG 67

The rotor consists of a 8-pole permanent magnet on the shaft or on a clamping sleeve. It is not supported in the generator housing but is connected rigidly with the drive shaft of the motor.

The stator consists of 4 connected coils per phase encapsulated in a light alloy casing.

Mechanical features EG 71.3.2/...

The rotor with 8-pole permanent magnet runs in a covered grooved ball bearings and is supported in the generator housing. The stator is formed by 4 connected coils per phase, which are encapsulated in a light seawater and corrosion resistant alloy housing.

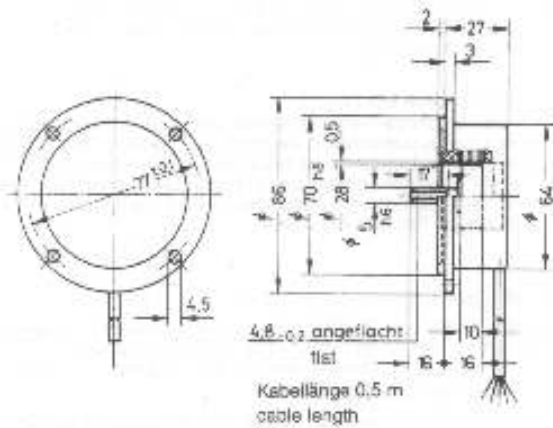
The generator is maintenance-free, different versions can be delivered with spigot, flange, foot or reeds.

Technical Data

| | |
|-----------------------------------|--|
| Voltage at no load (per 1000 rpm) | 30V DC, -0 + 10 % independent of rotation sense, or 22,5V AC (single phase) (special voltage upon request) |
| Thermal limiting current | 30 mA |
| Resistance | About 650 internal resistance for DC, About 300 coil resistance per phase against neutral point (Mp) |
| Voltage ripple (for DC voltage) | about 4% for 20 mA at a frequency of 2 n/5 (400 Hz at 1000 rpm) |
| Linearity error (for DC voltage) | <= 1% within control range, ±0.1 % with regression in the range from 100 to 1000 rpm. |
| Lower limit of control range | 30 rpm |
| Temperature error | >= 0,2 % per 10 K |
| Insulation class | E acc. VDE 0530 (IEC 85) |
| Test voltage | 2000 V against housing |
| Mechanical speed | maximum 12000 rpm |
| Moment of inertia | About 45 gcm ² for construction with shaft About 85 gcm ² for construction without shaft, with clamping sleeve (construction acc. DIN 40050) for EG 66 ..., EG 67 ... |
| Starting torque | 0,4 Ncm for EG 71.3.3/ ... |
| Working temperature | - 30 °C to + 100 °C |
| Enclosure | IP 54 (DIN 40050) for EG 66..., EG 67... shaft side IP 40 - housing IP 54 (special version IP 65 for EG 71.3.3/..) |
| Electrical connection | EG 66... 2-, or 3-, 5-core oil resistant cable. EG 67... 2- or 3 pole terminal block EG 71.3.2/ .. 6 pole terminal block |
| Weight | EG 71.3.2/.z: 870 g bei EG 71.3.2/.f: 1250 g bei EG 66..., EG 67 48 g for construction with shaft 66 g for construction without shaft stator 260 g |

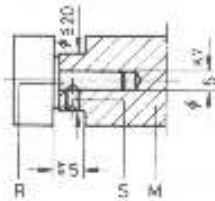
| Typ | Ausgang | Anschlußkabel |
|---------------|--|--|
| EG 66.3.2/... | Dreiphasen-Wechsel- und Gleichspannung | ws ≙ U, br ≙ V, gn ≙ W gr ≙ (+), ge ≙ (-) |
| EG 66.3/... | Dreiphasen-Wechselspannung | ws ≙ U, br ≙ V, gn ≙ W |
| EG 66.2/... | Gleichspannung | ws ≙ (-), br ≙ (+) |
| EG 67.2/... | Gleichspannung | 1 2 - + |
| EG 67.3/... | Dreiphasen-Wechselspannung | 1 2 3 U V W |

EG 66...



Anbauzeichnung für Rotor
Gerätetyp EG 66...
EG 67...

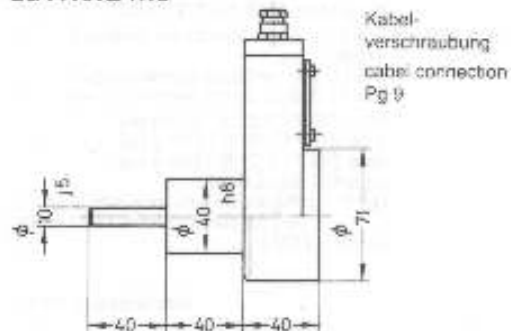
assembly drawing for rotor instrument
type EG 66...
EG 67...



Wegen magnetischer Beeinflussung diese Maße für die Anschlußwelle nicht unter- bzw. überschreiten
Don't pass the measures for the connection shaft for reasons of magnetic interference.

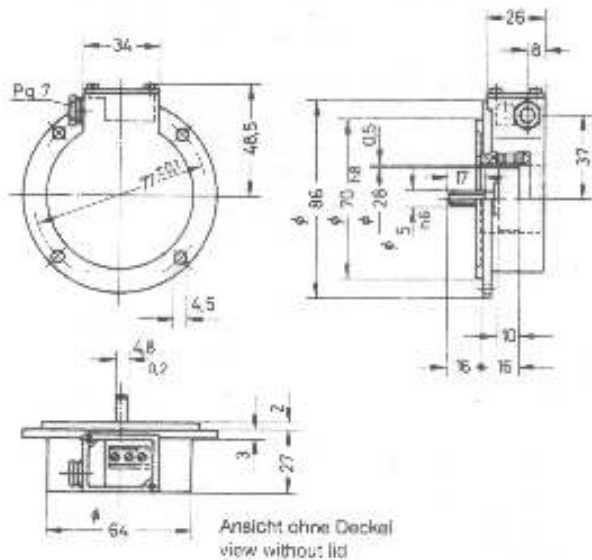
- R Rotorwelle R rotor shaft
- S Sicherungsschraube S locking screw
- M Motorwelle M motor shaft

EG 71.3.2/...z



Bestellangaben 1. Typ 2. Spannung pro 1000 min
data for order 1. type 2. voltage per 1000 rpm

| Type | Output | Connection cable |
|---------------|-------------------------------|--|
| EG 66.3.2/... | three-phase AC and DC voltage | WH ≙ U, BN ≙ V, GN ≙ W GY ≙ (+), YE ≙ (-) |
| EG 66.3/... | three-phase AC voltage | WH ≙ U, BN ≙ V, GN ≙ W |
| EG 66.2/... | DC voltage | WH ≙ (-), BN ≙ (+) |
| EG 67.2/... | DC voltage | 1 2 - + |
| EG 67.3/... | three-phase AC voltage | 1 2 3 U V W |



elektr. Anschluß
electrical connection

| | | | | | |
|---|---|---|----|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| U | V | W | Mp | - | + |

Weitere mechanische Anschlüsse auf Anfrage
other mechanical connections upon request.

Technische Änderungen vorbehalten 10.98
subject to technical alterations