

RDC 215

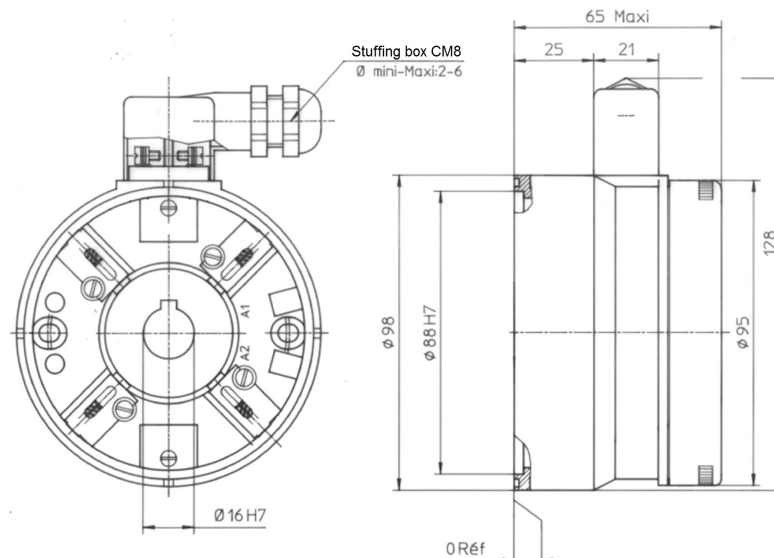
Direct Current Tachometer generator



- Applications :**
- Industrial applications
 - Machine tools

- Description :**
- Hollow shaft tachometer generator : rotor/stator set
 - Permanent magnet excitation
 - Commutator on opposite of mounting side
 - Several options
 - **SILVER COMMUTATOR**

DIAGRAM



MAIN CHARACTERISTICS

| DESIGNATION | SYMB | VALUES |
|------------------------------------|--------------|------------------------|
| Max. speed (mechanical) | n_m | 7500 rpm |
| Moment of inertia | J | 1,8 km cm ² |
| No load driving torque | Mr | $\leq 0,5\ N.cm$ |
| Maximum E.M.F | E_m | 300 V |
| Maximum linearity error | ΔE | $\leq 0,15\ \%E_T$ |
| Overall ripple rate (peak to peak) | ΔE_c | $\leq 0,5\ \%E_c$ |
| Rotation harmonics (f=2 p.n) | ΔE_p | $\leq 0,05\ \%E_c$ |
| Slot harmonics (f=Z.n) | ΔE_z | $\leq 0,45\ \%E_c$ |
| Calibration precision | ΔE_o | $\pm 2\ \%E_{T0}$ |
| E.M.F. tempetaure drift | | |
| - not compensated | ΔE_c | 0,03 % °C |
| - compensated | | |
| Time constant | C_t | 0,6 ms |
| Filter : Time constant of filter | | 0,1 ms |
| Load current | | 1,5 mA |
| Speed | | 3000 rpm |

CONSTRUCTION DETAILS

| | | |
|---------------------------------|----|---------------------------------------|
| Number of poles | 2p | 4 |
| Number of armature slots | | 33 |
| Number of commutator blades | | 33 |
| Insultation class | | B (IEC 34-1) |
| Operating temperature | | -20°C / +80 °C |
| Climatic protection | | C _a (IEC 68-1) |
| Protection degree | | IP 00 (IEC 34-5) IP 68 (DIN 40050) |
| Direction of rotation | | reversible |
| Excitation : Aimants permanents | | SmCo |

| | |
|---------------|---------------|
| Weight | 1,2 kg |
|---------------|---------------|

MECHANICAL OPTIONS

| ARMATURE BORE Ø d (mm) | | | MOTOR CENTERING END FRAME Ø D (mm) | ARMATURE CLAMPING DEVICE |
|---------------------------|------|------|---------------------------------------|-----------------------------|
| Standard | Max. | Min. | Standard | Key or expanding device |
| 16 ^{H7} | 16 | 8 | 88 | |

OPTIONS

- No adaptation possible

AVAILABLES OPTIONS

- No adaptation possible



Markings and polarity of terminals (cables) for counter-clockwise rotation viewing the mounting face

A1 : +
A2 : -

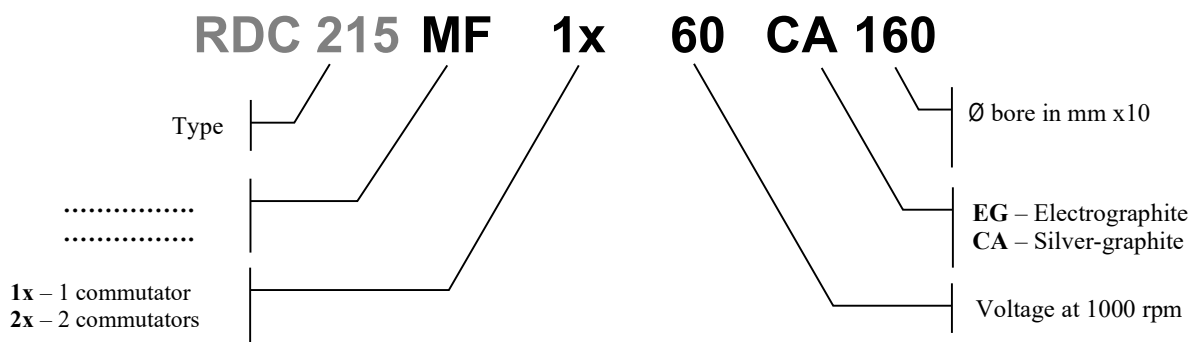
ELECTRICAL OPTIONS

| DESCRIPTION | SYMB | UNIT | VALUES | | | | | |
|---------------------------|----------------------|----------|------------|------|------|------|------|------------|
| | | | Min. 10 | 20 | 30 | 40 | 50 | Max. 60 |
| E.M.F. at 1000 rpm | E_n | V | | | | | | |
| Voltage gradient | C _v | V/rpm | 0,01 | 0,02 | 0,03 | 0,04 | 0,05 | 0,06 |
| Armature resistance | R _a | Ω | 5 | 24 | 36 | 62 | 97 | 130 |
| Max thermal load | I _{th} | mA | 280 | 170 | 106 | 82 | 66 | 59 |
| Max. allowed speed | n _a | rpm | 7500 | 7500 | 7500 | 7500 | 6000 | 5000 |

BRUSHES

| GRADE | CODE | APPLICATION LIMITS | DIMENSIONS | NUMBER |
|-----------------------------|----------|--|---------------|--------|
| EG - Electrographite | /0002607 | Special applications, on request | 6 x 4 x 11 mm | 4 |
| CA - Silver-graphite | /0001397 | STANDARD for normal use at E.M.F < 300 v | | |

PRODUCT DESCRIPTION



When inquiring, please advise the serial number of the tachogenerator to be replaced.