

TYPE

# RE.0 444 SR

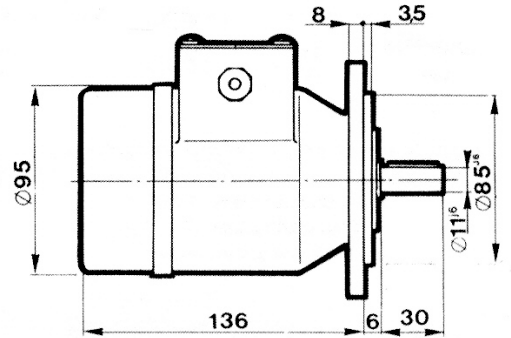
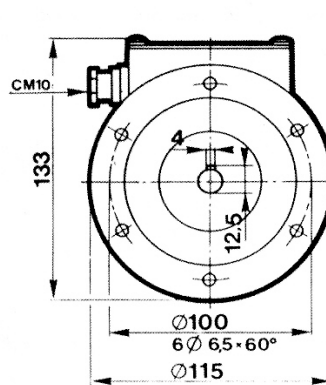


## DESTINATION

- Railway or severe industrial applications

## DESCRIPTION

- Model derived from RE.0 444 R
- Designed for railway specifications
- Only with flange and one commutator



Masse kg	2,8
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## GENERAL DATA

Designation	Symbol	Unit	Value	
Maximum speed (mechanical)	$n_m$	rpm.	12000	
Moment of inertia	J	kg cm <sup>2</sup>	0,950	
No load driving torque	$M_r$	N. cm	1,50	
Maximum radial shaft stress	F	da N	1,0	
Maximum E.M.F.	$E_m$	V	600	
Maximum linearity error	$\Delta E$	% $E_T$	$\leq 0,15$	
Overall ripple rate (peak to peak)	$\Delta E_C$	% $E_C$	$\leq 0,5$	
Rotation harmonics ( $f = 2 p.n$ )	$\Delta E_P$	% $E_C$	$\leq 0,2$	
Slot harmonics ( $f = Z.n$ )	$\Delta E_Z$	% $E_C$	$\leq 0,3$	
Calibration precision	$\Delta E_o$	% $E_{T_o}$	$\pm 1$	
E.M.F. temperature drift - not compensated - compensated	$\Delta E_\theta$	% /°C	0,02 0,005	
Time constant	$C_t$	ms	2,5	
*Filter: Time constant	$R_f \times R_C$	ms	0,47	
Load current	$I_c$	mA	5	
Speed	n	rpm.	3000	

Construction details		
Number of poles	2p	2
Number of armature slots	Z	19
Number of collector blades	K	57
Insulation class	B	(IEC 34-1)
Operating temperature		-30° - +130 °C
Climatic protection	$C_a$	(IEC 68-1)
Protection degree		IP 56 (IEC 34-5)
Direction of rotation		Reversible
Excitation		Permanent magnets Alnico

\* Filter-connecting diagram on demand

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TYPE  
RE.0444 SR

### Mechanical options

### Shaft ends and bearings

	Mounting side			Opposite mounting side		
	D (mm)	L (mm)	Bearings	D (mm)	L (mm)	Bearings
Standard	11	30	15 x 32 x 9 ZZ			10 x 26 x 8 ZZ
Max.	14	-	15 x 32 x 9 ZZ	10	-	10 x 26 x 8 ZZ

### Options

- special flange
- special shaft end

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

1 collector

A1 : +

A2 : -

### Available options on 2nd shaft end

### Electrical options

				Min.										Max.
E.M.F. at 1000 rpm.	$E_n$	V	1 coll.	6	20	30	40	50	60	80	100	120	150	200
Voltage gradient	$C_v$	V/rpm	1 coll.	0,006	0,020	0,030	0,040	0,050	0,060	0,080	0,100	0,120	0,150	0,200
Armature resistance	$R_a$	$\Omega$	1 coll.	1,50	12	28	45	70	100	180	280	400	640	900
Max. thermal load	$I_{th}$	A	1 coll.	1,40	0,55	0,35	0,25	0,22	0,18	0,14	0,11	0,09	0,07	0,07
Max. allowed speed	$n_a$	rpm	1 coll.	12000	12000	12000	12000	12000	10000	7500	6000	5000	4000	3000

### Brushes

Number	Size	Grade	Application limits		Reference
4	3,1 x 4,1 x 12,5	Electrographite (EG)	<b>STANDARD</b>	max. voltage 600 V	31 - 41 - EG
		Silver-graphite (CA)	Recommended for low speed and E.M.F.	< 300 V	31 - 41 - CA