

Tachometer Generator

REO444R

RADIO-ENERGIE SAS

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www.radio-energie.eu - Capital de 300 000 Euros immatriculée au RCS de Poitiers sous n° 829 195 668
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RE.0444 R (Robust)

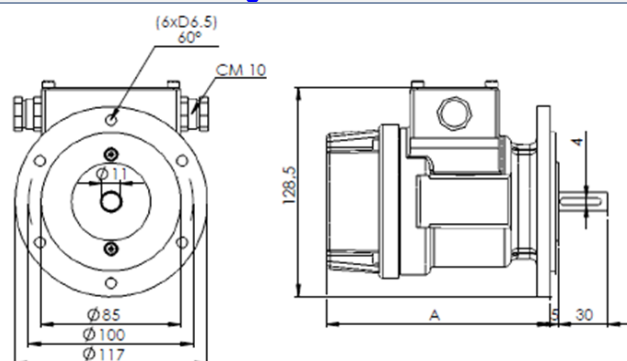
Direct Current Tachometer generator



- Applications :**
- Industry
 - Speed control & regulation

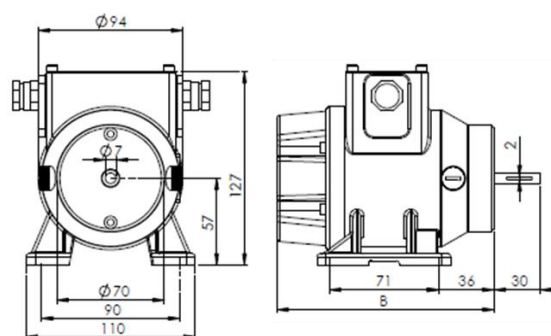
- Features :**
- Robust design
 - High quality signal
 - Terminal box
 - Mechanical combinations with encoders & speed switches
 - Various electrical options

RE.0444R – B5 flange



	1 commutator	2 commutators
A	136 mm	155 mm

RE.0444R – B3 foot



	1 commutator	2 commutators
B	142 mm	161 mm

MAIN CHARACTERISTICS

DESCRIPTION	SYMB	VALUE
Max. speed	n_m	12 000 rpm
Moment of inertia	J	0,95 Kg cm ²
No-load driving torque	M_r	1,5 N.cm
Max. radial shaft stress	F	1,0 da N
Maximum E.M.F.	E_m	600 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	$\leq 0,2 \% E_c$
Slots harmonics (f=Z.n.)	ΔE_z	$\leq 0,3 \% E_c$
Calibration precision	ΔE_o	+ 1 % E_{T_o}
E.M.F. temperature drift		
Not compensated	ΔE_e	0,02 %/°C
Compensated		0,005 %/°C
Time constant	C_t	2,5 ms
*Filter :		
Time constant of filter		0,47 ms
Load current		5 mA
Speed		3000 rpm

CONSTRUCTION DETAILS

Number of poles	2
Armature slots number	19
Commutator blades number	57
Insulation class	B (IEC 34-1)
Operating temperature	-30 °C +130 °C
Climatic protection	C _a (IEC 68-1)
Ingress protection	IP54 (IEC 34-5)
Direction of rotation	reversible
Excitation: Permanent magnets:	Alnico

Net weight	2,8 kg (1 commutator) 3,2 kg (2 commutators)
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MECHANICAL OPTIONS

	MOUNTING SIDE			OPPOSITE MOUNTING SIDE (upon request)		
	D (mm)	L (mm)	Ball-bearing	D (mm)	L (mm)	Ball-bearing
Standard shaft	11	30	12 x 28 x 8 ZZ	7	30	8 x 22 x 7 ZZ
Special shaft	14 max	30	15 x 32 x 9 ZZ	8 max	30	8 x 22 x 7 ZZ

Various adaptors available for mounting devices on the rear of the tachometer generator.



Markings and polarity of terminals (cables) for counter-clockwise rotation, seen from the shaft.

1 COMMUTATOR

1 A1 : +
1 A2 : -

2 COMMUTATORS

2 A1 : +
2 A2 : -

ELECTRICAL OPTIONS

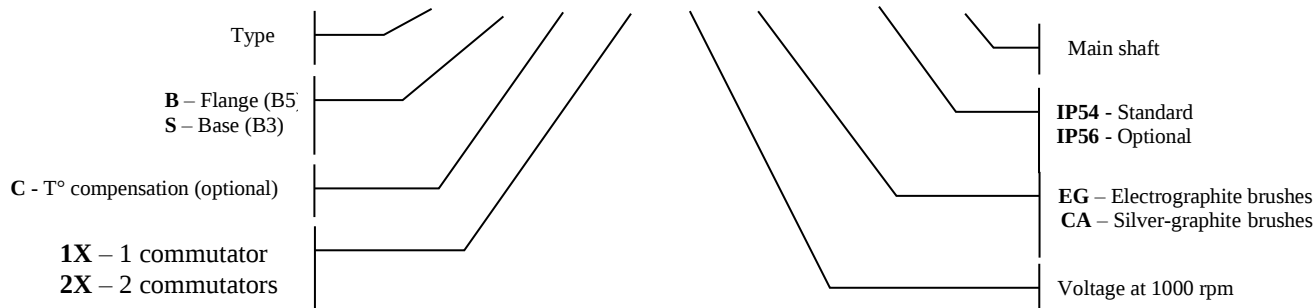
DESCRIPTION	SYMB	UNIT	VALUES											
E.M.F. at 1 000 rpm	E _n	V	1 com.	6	20	30	40	50	60	80	100	120	150	200
			2 com.		2 x 20	2 x 30		2 x 50	2 x 60		2 x 100			
Voltage gradient	C _v	V/rpm	1 com.	0,006	0,020	0,030	0,040	0,050	0,060	0,080	0,100	0,120	0,150	0,200
			2 com.		2 x 0,02	2 x 0,03		2 x 0,05	2 x 0,06		2 x 0,1			
Armature resistance	R _a	Ω	1 com.	1,50	12	28	45	70	100	180	280	400	640	900
			2 com.		2 x 24	2 x 55		2 x 150	2 x 200		2 x 470			
Max thermal load	I _{th}	A	1 com.	1.4	0,55	0,35	0,25	0,22	0,18	0,14	0,11	0,09	0,07	0,07
			2 com.		2 x 0,23	2 x 0,14		2 x 0,09	2 x 0,09		2 x 0,05			
Max. Allowed speed	n _a	rpm	EG	12 000	12 000	12 000	12 000	12 000	10 000	7 500	6 000	5 000	4 000	3 000
			CA	6 000	6 000	6 000	6 000	6 000	5 000	3 750	3 000	2 500	2 000	1 500

BRUSHES

GRADE	PART NO	MAX OUTPUT VOLTAGE	DIMENSIONS	QUANTITY
EG - Electrographite	/0002607	600 V	3,1 x 4,1 x 12,5 mm	4
CA - Silver-graphite	/0001397	< 300 V		

PRODUCT DESCRIPTION

RE.0444R B C 1x60 EG IP54 11x30



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

Main Item / Part Number for

RE.444 R1

OUR CODE		OUR PRODUCT DESCRIPTION	Types	Mounting Type	Nb Collecteur	Charac. at 1000 rpm	Comp.	Brush	IP	Shaft
0000025	REO	444R B 1X60 EG IP54 11X30	RE.0444 R1	B > Flange	1	60 V	No	EG	54	11x30
0000026	REO	444R B 1X60 CA IP54 11X30	RE.0444 R1	B > Flange	1	60 V	No	CA	54	11x30
0000031	REO	444R S 1X60 EG IP54 11X30	RE.0444 R1	S > Foot	1	60 V	No	EG	54	11x30
0000032	REO	444R S 1X60 CA IP54 11X30	RE.0444 R1	S > Foot	1	60 V	No	CA	54	11x30
0000131	REO	444R B C1X60 EG IP54 11X30	RE.0444 R1	B > Flange	1	60 V	Yes	EG	54	11x30
0000029	REO	444R B C1X60 CA IP54 11X30	RE.0444 R1	B > Flange	1	60 V	Yes	CA	54	11x30
0005128	REO	444R S C1X60 EG IP54 11X30	RE.0444 R1	S > Foot	1	60 V	Yes	EG	54	11x30
0000033	REO	444R S C1X60 CA IP54 11X30	RE.0444 R1	S > Foot	1	60 V	Yes	CA	54	11x30
0016333	REO	444R B C1X60 EG IP56 11X30	RE.0444 R1	B > Flange	1	60 V	Yes	EG	56	11x30
0005372	REO	444R B C1X60 CA IP56 11X30	RE.0444 R1	B > Flange	1	60 V	Yes	CA	56	11x30
0016816	REO	444R S C1X60 EG IP56 11X30	RE.0444 R1	S > Foot	1	60 V	Yes	EG	56	11x30
0018372	REO	444R S C1X60 CA IP56 11X30	RE.0444 R1	S > Foot	1	60 V	Yes	CA	56	11x30
0000158	REO	444R B 1X60 EG IP56 11X30	RE.0444 R1	B > Flange	1	60 V	No	EG	56	11x30
0000027	REO	444R B 1X60 CA IP56 11X30	RE.0444 R1	B > Flange	1	60 V	No	CA	56	11x30
0006619	REO	444R S 1X60 EG IP56 11X30	RE.0444 R1	S > Foot	1	60 V	No	EG	56	11x30
0017388	REO	444R S 1X60 CA IP56 11X30	RE.0444 R1	S > Foot	1	60 V	No	CA	56	11x30
0018455	REO	444R B 1X10 CA IP54 11X30	RE.0444 R1	B > Flange	1	10 V	No	CA	54	11x30
0000132	REO	444R B 1X100 EG IP54 11X30	RE.0444 R	B > Flange	1	100 V	No	EG	54	11X30
0006439	REO	444R B 1X100 CA IP54 11X30	RE.0444 R1	B > Flange	1	100 V	No	CA	54	11X30
C4R10S100G06	REO	444R B 1X6 EG IP54 11X30	RE.0444 R1	B > Flange	1	6 V	No	EG	54	11x30
C4R10S100A06	REO	444R B 1X6 CA IP54 11X30	RE.0444 R1	B > Flange	1	6 V	No	CA	54	11x30
0018732	REO	444R B 1X15 CA IP54 11X30	RE.0444 R1	B > Flange	1	15 V	No	CA	54	11x30
0002029	REO	444R B 1X20 EG IP54 11X30		B > Flange	1	20 V	No	EG	54	11x30
0006437	REO	444R B 1X25 EG IP54 11X30	RE.0444 R1	B > Flange	1	25 V	No	EG	54	11x30
0005458	REO	444R B 1X30 EG IP54 11X30	RE.0444 R1	B > Flange	1	30 V	No	EG	54	11x30
0005386	REO	444R B 1X30 CA IP54 11X30	RE.0444 R1	B > Flange	1	30 V	No	CA	54	11x30
0002039	REO	444R B 1X40 EG IP54 11X30	RE.0444 R1	B > Flange	1	40 V	No	EG	54	11x30
0007015	REO	444R B 1X40 CA IP54 11X30	RE.0444 R1	B > Flange	1	40 V	No	CA	54	11x30
0010762	REO	444R B 1X48 EG IP54 11X30	RE.0444 R1	B > Flange	1	48 V	No	EG	54	11x30
0015050	REO	444R B 1X50 EG IP54 11X30	RE.0444 R1	B > Flange	1	50 V	No	EG	54	11x30
0024793	REO	444R B 1X50 CA IP54 11X30	RE.0444 R1	B > Flange	1	50 V	No	CA	54	11x30
0019567	REO	444R B 1X67 CA IP54 11X30	RE.0444 R1	B > Flange	1	67 V	No	CA	54	11x30
0020509	REO	444R B 1X80 EG IP54 11X30	RE.0444 R1	B > Flange	1	80 V	No	EG	54	11x30
0019139	REO	444R B 1X80 CA IP54 11X30	RE.0444 R1	B > Flange	1	80 V	No	CA	54	11x30
0007181	REO	444R B 1X90 EG IP54 11X30		B > Flange	1	90 V	No	EG	54	11X30
0013059	REO	444R B 1X110 EG IP54 11X30	RE.0444 R1	B > Flange	1	110 V	No	EG	54	11x30
C4R10S100AB0	REO	444R B 1X110 CA IP54 11X30	RE.0444 R1	B > Flange	1	110 V	No	CA	54	11x30

OUR CODE	OUR PRODUCT DESCRIPTION	Types	Mounting Type	Nb Collecteur	Charac. at 1000 rpm	Comp.	Brush	IP	Shaft
0019399	REO 444R B 1X120 EG IP54 11X30	RE.0444 R1	B > Flange	1	120 V	No	EG	54	11x30
0008119	REO 444R B 1X120 CA IP54 11X30	RE.0444 R1	B > Flange	1	120 V	No	CA	54	11x30
0005561	REO 444R B 1X150 EG IP54 11X30	RE.0444 R1	B > Flange	1	150 V	No	EG	54	11x30
0005129	REO 444R B 1X150 CA IP54 11X30		B > Flange	1	150 V	No	CA	54	11x30
C4R10S100AH0	REO 444R B 1X170 CA IP54 11X30	RE.0444 R1	B > Flange	1	170 V	No	CA	54	11x30
0005667	REO 444R B 1X200 EG IP54 11X30	RE.0444 R1	B > Flange	1	200 V	No	EG	54	11X30
0008384	REO 444R B 1X200 CA IP54 11X30	RE.0444 R1	B > Flange	1	200 V	No	CA	54	11x30
0012933	REO 444R S 1X10 CA IP54 11X30	RE.0444 R1	S > Foot	1	10 V	No	CA	54	11x30
C4R10P100G15	REO 444R S 1X15 EG IP54 11X30	RE.0444 R1	S > Foot	1	15 V	No	EG	54	11x30
0015346	REO 444R S 1X20 EG IP54 11X30	RE.0444 R1	S > Foot	1	20 V	No	EG	54	11x30
0009164	REO 444R S 1X20 CA IP54 11X30	RE.0444 R1	S > Foot	1	20 V	No	CA	54	11X30
0010758	REO 444R S 1X30 EG IP54 11X30	RE.0444 R1	S > Foot	1	30 V	No	EG	54	11x30
0018458	REO 444R S 1X30 CA IP54 11X30	RE.0444 R1	S > Foot	1	30 V	No	CA	54	11x30
0020037	REO 444R S 1X40 EG IP54 11X30	RE.0444 R1	S > Foot	1	40 V	No	EG	54	11x30
0006264	REO 444R S 1X40 CA IP54 11X30	RE.0444 R1	S > Foot	1	40 V	No	CA	54	11x30
0012259	REO 444R S 1X50 CA IP54 11X30	RE.0444 R1	S > Foot	1	50 V	No	CA	54	11x30
0020979	REO 444R S 1X100 EG IP54 11X30	RE.0444 R1	S > Foot	1	100 V	No	EG	54	11x30
0011622	REO 444R S 1X100 CA IP54 11X30	RE.0444 R1	S > Foot	1	100 V	No	CA	54	11x30
0008068	REO 444R S 1X120 EG IP54 11X30	RE.0444 R1	S > Foot	1	120 V	No	EG	54	11x30
0001696	REO 444R S 1X120 CA IP54 11X30	RE.0444 R1	S > Foot	1	120 V	No	CA	54	11x30
0005838	REO 444R S 1X150 EG IP54 11X30	RE.0444 R1	S > Foot	1	150 V	No	EG	54	11x30
0006692	REO 444R S 1X150 CA IP54 11X30	RE.0444 R1	S > Foot	1	150 V	No	CA	54	11x30
0007614	REO 444R B C1X20 CA IP54 11X30	RE.0444 R1	B > Flange	1	20 V	Yes	CA	54	11x30
0022465	REO 444R B C1X40 EG IP54 11X30	RE.0444 R1	B > Flange	1	40 V	Yes	EG	54	11X30
0007343	REO 444R B C1X40 CA IP54 11X30P	RE.0444 R1	B > Flange	1	40 V	Yes	CA	54	11x30
0012031	REO 444R B C1X40 CA IP54 11X30	RE.0444 R1	B > Flange	1	40 V	Yes	CA	54	11X30
0001677	REO 444R B C1X100 CA IP54 11X30	RE.0444 R1	B > Flange	1	100 V	Yes	CA	54	11x30
0004500	REO 444R B C1X200 CA IP54 11X30	RE.0444 R1	B > Flange	1	200 V	Yes	CA	54	11x30
0011587	REO 444R S C1X40 EG IP54 11X30	RE.0444 R1	S > Foot	1	40 V	Yes	EG	54	11X30
C4R1CP100A50	REO 444R S C1X50 CA IP54 11X30	RE.0444 R1	S > Foot	1	50 V	Yes	CA	54	11X30
0023715	REO 444R S C1X100 EG IP54 11X30	RE.0444 R1	S > Foot	1	100 V	Yes	EG	54	11X30
0005722	REO 444R B 1X20 EG IP56 11X30	RE.0444 R1	B > Flange	1	20 V	No	EG	56	11x30
0006479	REO 444R B 1X20 CA IP56 11X30	RE.0444 R1	B > Flange	1	20 V	No	CA	56	11x30
0018772	REO 444R B 1X40 EG IP56 11X30	RE.0444 R1	B > Flange	1	40 V	No	EG	56	11x30
0027552	REO 444R B 1X40 CA IP56 11X30	RE.0444 R1	B > Flange	1	40 V	No	CA	56	11x30
0018068	REO 444R B 1X100 EG IP56 11X30	RE.0444 R1	B > Flange	1	100 V	No	EG	56	11x30
0020843	REO 444R B 1X150 EG IP56 11X30	RE.0444 R1	B > Flange	1	150 V	No	EG	56	11x30
0007983	REO 444R S 1X30 CA IP56 11X30	RE.0444 R1	S > Foot	1	30 V	No	CA	56	11x30

OUR CODE	OUR PRODUCT DESCRIPTION	Types	Mounting Type	Nb Collecteur	Charac. at 1000 rpm	Comp.	Brush	IP	Shaft
0000030	REO 444R B C1X60 CA IP54 11X30 PBSP SIEMENS	RE.0444 R1	B > Flange	1	60 V	Yes	CA	54	11x30
0001679	REO 444R B C1X60 CA IP54 11X30 A		B > Flange	1	60 V	Yes	CA	54	11X30
0019059	REO 444R B 1X100 EG IP54 11X30 A		B > Flange	1	100 V	No	EG	54	11X30
C4R10S11SA2*	REO 444R B 1X200 CA IP54 11X30 A 2B		B > Flange	1	200 V	No	CA	54	11X30
0000167	REO 444RT B 1x60 CA IP54 11x30 444R B 1X60 EG IP54 2BA		B > Flange	1	60 V	No	CA	54	11x30
0002081	REO 11X30 CP 7x30 CD 444R B C1X100 EG IP54 11X30	RE.0444 R1	B > Flange	1	60 V	No	EG	54	11x30
C4R1CS110G1*	REO A 444R B 1X150 CA IP54 11X30		B > Flange	1	100 V	Yes	EG	54	11X30
C4R10S110AF0	REO A	RE.0444 R1	B > Flange	1	150 V	No	CA	54	11x30 A
C4R10S100A19	REO 444R B 1X19 CA IP54 11X30C	RE.0444 R1	B > Flange	1	19 V	No	CA	54	11x30 C
C4R10E100A40	REO 444R S 1X40 CA IP56 11X30 C 444R S 1X100 EG IP54 11X30	RE.0444 R1	S > Foot	1	40 V	No	CA	56	11x30 C
0027556	REO M	RE.0444 R1	S > Foot	1	100 V	No	EG	54	11x30 M
0001693	REO 444R B C1X60 CA IP54 14X28 TTM5 444R B 1X60 EG IP54 14X29		B > Flange	1	60 V	Yes	CA	54	14X28
0005580	REO +PLAT 444R S 1X60 EG IP54 14X29	RE.0444 R1	B > Flange	1	60 V	No	EG	54	14X29
0007040	REO +PLAT		S > Foot	1	60 V	No	EG	54	14X29
0008889	REO 444R B C1X60 CA IP54 14X30L		B > Flange	1	60 V	Yes	CA	54	14X30
0008606	REO 444R B 1X60 EG IP54 14X30	RE.0444 R1	B > Flange	1	60 V	No	EG	54	14X30
0025629	REO 444R B 1X100 CA IP54 14X40 444RT B 1X100 CA IP54	RE.0444 R1	B > Flange	1	100 V	No	CA	54	14X40
0004443	REO D7,9X19,5 PC		B > Flange	1	100 V	No	CA	54	7,9X19,5
0011657	REO 444R B 1X60 EG IP54 7X30 444RT B 1X50 CA IP54 DX19	RE.0444 R1	B > Flange	1	60 V	No	EG	54	7X30
0002430	REO PC		B > Flange	1	50 V	No	CA	54	SPE

Main Item / Part Number for

RE.444 R2

OUR CODE		OUR PRODUCT DESCRIPTION	Types	Mounting Type	Nb Collecteur	Charac. at 1000 rpm	Comp.	Brush	IP	Shaft
0000035	REO	444R B 2X60 EG IP54 11X30	RE.0444 R2	B > Flange	2	60 V	No	EG	54	11x30
0000036	REO	444R B 2X60 CA IP54 11X30	RE.0444 R2	B > Flange	2	60 V	No	CA	54	11x30
0000039	REO	444R S 2X60 EG IP54 11X30	RE.0444 R2	S > Foot	2	60 V	No	EG	54	11x30
0000040	REO	444R S 2X60 CA IP54 11X30	RE.0444 R2	S > Foot	2	60 V	No	CA	54	11x30
0002083	REO	444R B C2X60 EG IP54 11X30	RE.0444 R2	B > Flange	2	60 V	Yes	EG	54	11x30
0000038	REO	444R B C2X60 CA IP54 11X30	RE.0444 R2	B > Flange	2	60 V	Yes	CA	54	11x30
0012139	REO	444R S C2X60 EG IP54 11X30	RE.0444 R2	S > Foot	2	60 V	Yes	EG	54	11x30
0000125	REO	444R S C2X60 CA IP54 11X30	RE.0444 R2	S > Foot	2	60 V	Yes	CA	54	11x30
0005361	REO	444R B 2X40 EG IP54 11X30	RE.0444 R2	B > Flange	2	40 V	No	EG	54	11x30
0005357	REO	444R B 2X100 EG IP54 11X30	RE.0444 R2	B > Flange	2	100 V	No	EG	54	11x30
0021866	REO	444R B 2X100 CA IP54 11X30	RE.0444 R2	B > Flange	2	100 V	No	CA	54	11x30
0006567	REO	444R B C2X100 CA IP54 11X30	RE.0444 R2	B > Flange	2	100 V	Yes	CA	54	11x30
0006248	REO	444R B 2X60 EG IP56 11X30	RE.0444 R2	B > Flange	2	60 V	No	EG	56	11x30
0000037	REO	444R B 2X60 CA IP56 11X30	RE.0444 R2	B > Flange	2	60 V	No	CA	56	11x30
C4R20E100A60	REO	444R S 2X60 CA IP56 11X30	RE.0444 R2	S > Foot	2	60 V	No	CA	56	11x30
0019322	REO	444R B C2X60 EG IP56 11X30	RE.0444 R2	B > Flange	2	60 V	Yes	EG	56	11x30
0006618	REO	444R B C2X60 CA IP56 11X30	RE.0444 R2	B > Flange	2	60 V	Yes	CA	56	11x30
0009027	REO	444R S C2X60 EG IP56 11X30	RE.0444 R2	S > Foot	2	60 V	Yes	EG	56	11x30
0006381	REO	444R B 2X60 CA IP54 14X30	RE.0444 R2	B > Flange	2	60 V	No	CA	54	14X30
0022934	REO	444R S 2X60 EG IP54 14X29+PL	RE.0444 R2	S > Foot	2	60 V	No	EG	54	14X29
C4R20C100A1*	REO	444R B 2X100 CA IP56	RE.0444 R2	B > Flange	2	100 V	No	CA	56	SPE
0001388	REO	444R B 2X60 EG IP54 11X30 A	RE.0444 R2	B > Flange	2	60 V	No	EG	54	11X30
0022112	REO	444R B+S 2X60 CA IP54 11X30	RE.0444 R2	Flange + foot	2	60 V	No	CA	54	11x30
C4R20C111A60	REO	444R B 2X60 CA IP56 11X30 7X30	RE.0444 R2	B > Flange	2	60 V	No	CA	56	11x30