

# MOTOREN DESMEDT NV

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## *Self-braking asynchronous three-phase motors*

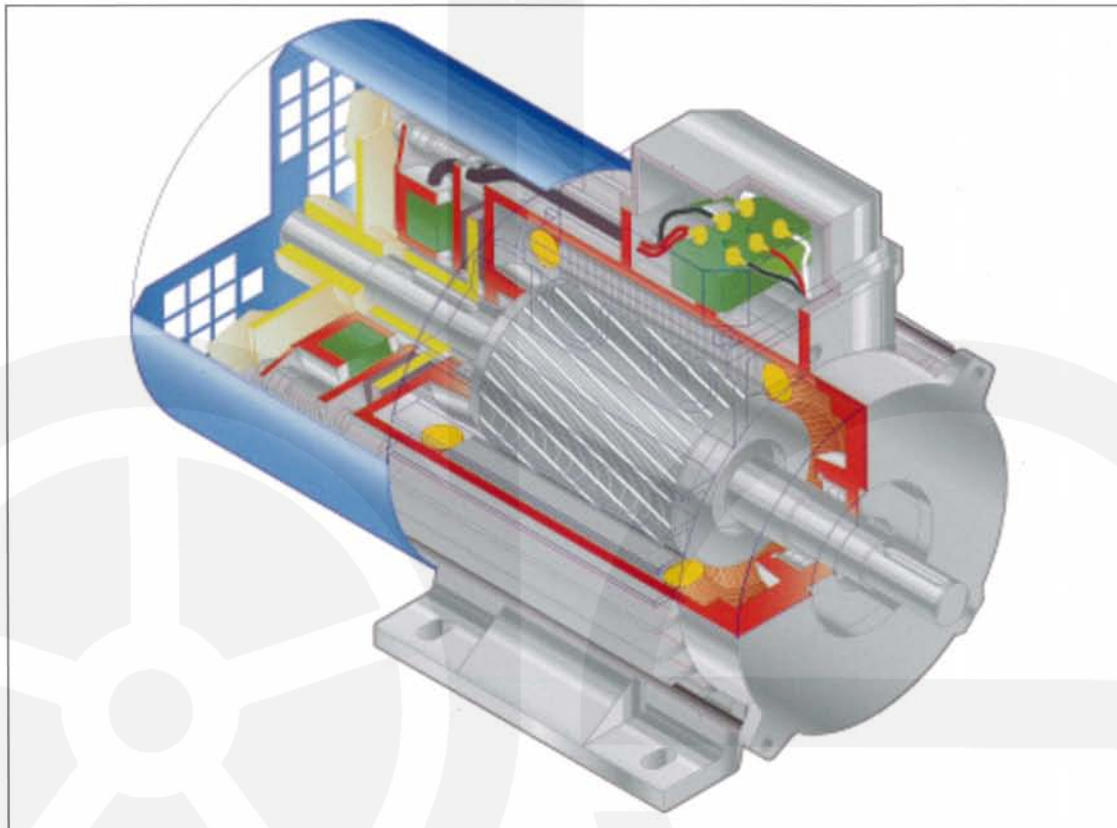
### *Externally ventilated closed structure FK and FKL with flywheel*

**COEL** self-braking motors are closed, externally ventilated, built in accordance with IEC 72 (UNEL) dimensional norms.

The materials used for their construction, and the simplicity of all components inside the braking group, guarantee long motor life and limited maintenance.

The braking group, fruit of a long experience, is designed and built completely by **COEL** thus avoiding all makeshift solutions, and making the **COEL** self-braking motor a harmonious whole, resulting from homogeneous components.

Use of the FK series motors is suggested for those applications which do not require high braking torque values, but for which reliability of a safe braking group is anyhow necessary.



### *Characteristics*

- Disc brake without axial movement of the shaft
- The FK and FKL type motors, as opposed to similar models from other manufacturers, provide the possibility of adjusting the braking torque within very wide range of values
- Operation of the brake within very low values of noise and amperage
- Smaller size compared to the F series
- The FK - FKL series are fitted with DC electromagnets only
- A side release lever can be provided on request to permit rotation of the shaft rotor from the brake side.

## Three-phase 2 poles - 3000 Min.-1

TYPE	KW	Min.-1	COS $\varphi$	I n V.400	Ma/Mn	I.A/I.N	J Kgm <sup>2</sup>	BRAKING TORQUE MF MAX Nm.	START- UP C/h	AMP.V.230 BRAKE D.C. (m A)	WEIGHT KGS.
FK56B2	0,12	2800	0,68	0,54	1,7	2,9	0,00030	7	9500	225	4,2
FK63A2	0,18	2830	0,72	0,70	2,3	3,5	0,00042	7	8000	225	4,8
FK63B2	0,25	2810	0,73	0,90	2,3	3,9	0,00057	7	7500	225	4,8
FK63C2	0,37	2780	0,72	1,10	2,4	4,0	0,00061	7	6000	225	5
FK71A2	0,37	2800	0,78	1,25	2,1	4,0	0,00071	7	6000	225	10,7
FK71B2	0,55	2800	0,81	1,75	2,2	4,1	0,00082	7	5000	225	11,8
FK71C2	0,75	2800	0,76	2,10	2,3	4,3	0,00098	7	4000	225	12
FK80A2	0,75	2820	0,82	1,90	2,5	4,8	0,00146	7	6000	225	14,4
FK80B2	1,10	2820	0,84	2,70	2,5	4,9	0,00173	7	5300	225	15,5
FK90SA2	1,50	2820	0,86	3,30	2,5	4,9	0,00284	14	4000	400	24,3
FK90SB2	1,84	2840	0,86	4,10	2,5	4,9	0,00295	14	3500	400	26,3
FK90LA2	2,20	2840	0,87	4,90	2,5	5,0	0,00305	14	3000	400	28,3
FK100LA2	3,00	2850	0,87	6,60	2,5	4,8	0,00572	22	1200	400	36,3
FK112MB2	4,00	2880	0,87	8,20	2,4	7,4	0,00720	22	800	400	42,5

### D.C. ELECTROMAGNET

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## Three-phase 4 poles - 1500 Min.-1

TYPE	KW	Min.-1	COS $\phi$	I n V.400	Ma/Mn	I.A/I.N	J Kgm <sup>2</sup>	BRAKING TORQUE MF MAX Nm.	START- UP C/h	AMP.V.230 BRAKE D.C. (m A)	WEIGHT KGS.
FK56B4	0,08	1320	0,58	0,38	1,80	2,6	0,00030	7	12500	225	4,3
FK63A4	0,12	1350	0,70	0,55	1,95	2,8	0,00042	7	12000	225	5,5
FK63B4	0,18	1340	0,71	0,74	1,80	2,3	0,00057	7	12000	225	5,5
FK63C4	0,23	1330	0,69	1,00	2,20	2,4	0,00061	7	10000	225	5,9
FK71A4	0,25	1390	0,70	0,9	2,20	3,7	0,00071	7	19500	225	9,5
FK71B4	0,37	1390	0,70	1,2	2,20	3,7	0,00082	7	18000	225	10,5
FK71C4	0,55	1380	0,72	1,7	2,30	4,0	0,00098	7	15000	225	11
FK80A4	0,55	1410	0,75	1,9	2,30	4,3	0,00146	7	10000	225	12,5
FK80B4	0,75	1410	0,76	2,3	2,30	4,3	0,00173	7	10000	225	13,5
FK80C4	0,90	1400	0,74	2,7	2,50	4,3	0,00185	7	9000	225	16,5
FK90SA4	1,10	1415	0,77	2,9	2,40	4,3	0,00284	14	10000	400	20
FK90LA4	1,50	1415	0,78	3,7	2,40	4,3	0,00305	14	10000	400	22
FK90LB4	1,85	1415	0,78	4,6	2,30	4,3	0,00388	14	9000	400	24
FK90LC4	2,20	1420	0,80	5,6	2,40	4,3	0,00430	14	8000	400	26
FK100LA4	2,20	1425	0,78	5,6	2,50	4,8	0,00572	22	7500	400	36,3
FK100LB4	3,00	1430	0,79	7,5	2,50	4,8	0,00612	22	7000	400	39,7
FK100LC4	3,30	1420	0,79	8,5	2,60	4,7	0,00750	22	6800	400	41
FK112MB4	4,00	1430	0,85	9,2	2,50	5,5	0,01180	22	3300	400	45

### D.C. ELECTROMAGNET

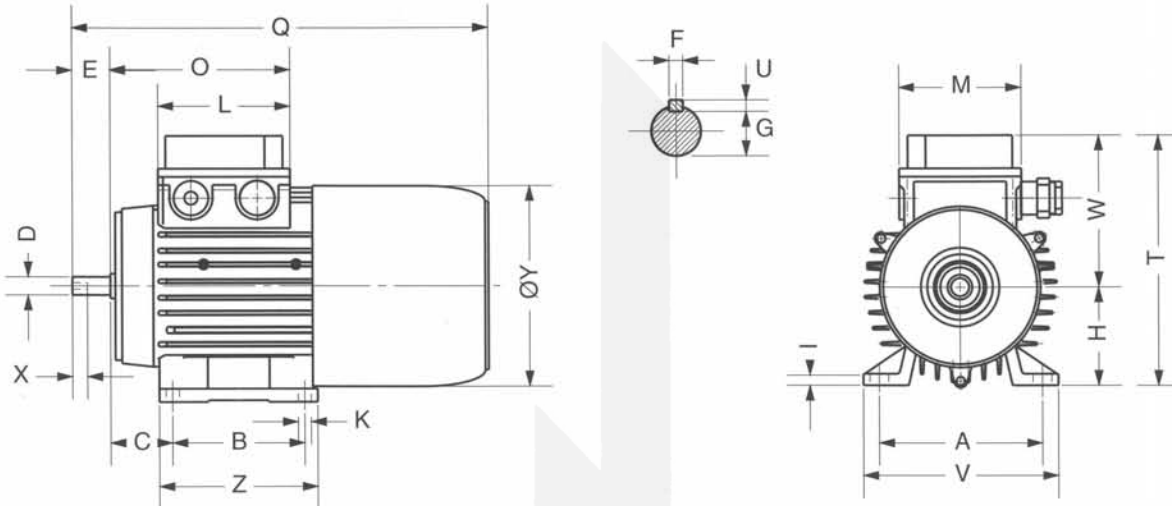
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## Overall dimensions

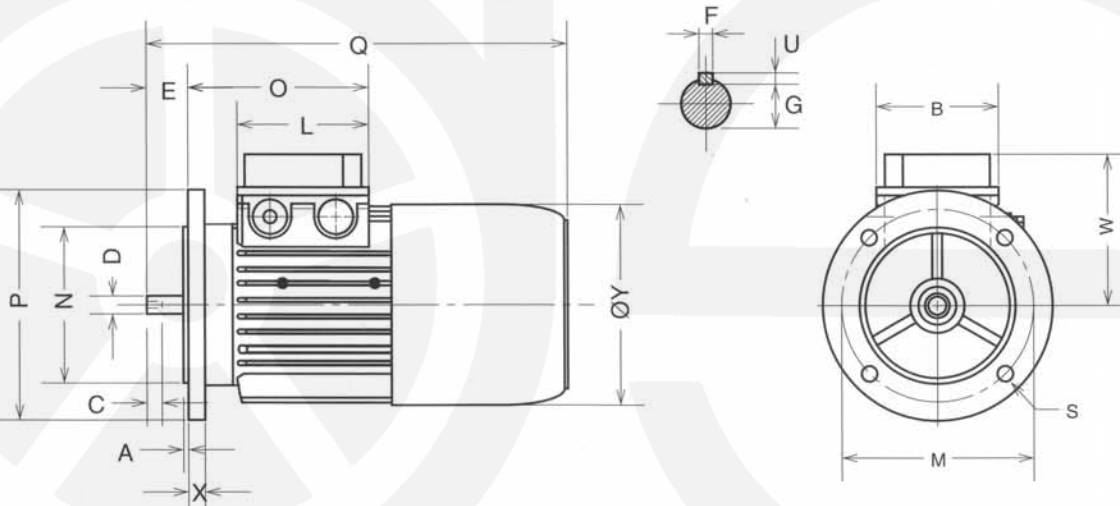
The double box is available upon request for all motor series

### B 3 CONSTRUCTIVE FORM



TYPE	A	B	C	D	E	F	G	H	K	I	O	L	M	Q	T	U	V	Z	W	Y	Z
FK 56	90	71	36	9	20	3	7,2	56	6	7	100	75	75	230	132	3	114	95	96	111	M4
FK 63	100	80	32	11	23	4	8,5	63	7	7	110	81	75	248	156	4	120	97	93	125	M4
FK 71	112	90	45	14	30	5	11	71	7	7	112	81	75	270	173	5	134	108	102	140	M5
FK 80	125	100	50	19	40	6	15,5	80	7	8	117	98,5	75	300	194	6	156	126	114	157	M6
FK 90 S	140	100	56	24	50	8	20	90	9	10	141	98,5	98,5	360	218	7	176	128	128	179	M8
FK 90 L	140	125	56	24	50	8	20	90	9	10	141	98,5	98,5	385	218	7	176	151	128	179	M8
FK 100	160	140	63	28	60	8	24	100	9	10	150	98,5	98,5	430	241	7	196	166	141	194	M8
FK 112	190	140	70	28	60	8	24	112	12	15	150	98,5	98,5	470	264	7	230	166	152	222	M8

### B 5 CONSTRUCTIVE FORM



TYPE	N	B	C	D	E	F	G	P	O	A	L	M	X	Q	S	U	W	Y
FK 56	80	75	M4	9	20	3	7,2	120	100	2,5	75	100	9	230	7,5	3	96	111
FK 63	95	75	M4	11	23	4	8,5	140	110	2,5	81	115	9	248	9,5	4	93	125
FK 71	110	75	M5	14	30	5	11	160	112	3,5	81	130	10	270	9,5	5	102	140
FK 80	130	75	M6	19	40	6	15,5	200	117	3,5	81	165	12	300	11,5	6	114	157
FK 90 S	130	98,5	M8	24	50	8	20	200	141	3,5	98,5	165	12	360	11,5	7	128	179
FK 90 L	130	98,5	M8	24	50	8	20	200	141	3,5	98,5	165	12	385	11,5	7	128	179
FK 100	180	98,5	M8	28	60	8	24	250	150	3,5	98,5	165	14	430	14	7	141	194
FK 112	180	98,5	M8	28	60	8	24	250	150	3,5	98,5	165	14	470	14	7	141	222

N.B.: Cable press gland from 56 to 63: PG 11; dal 71 al 112: PG 16

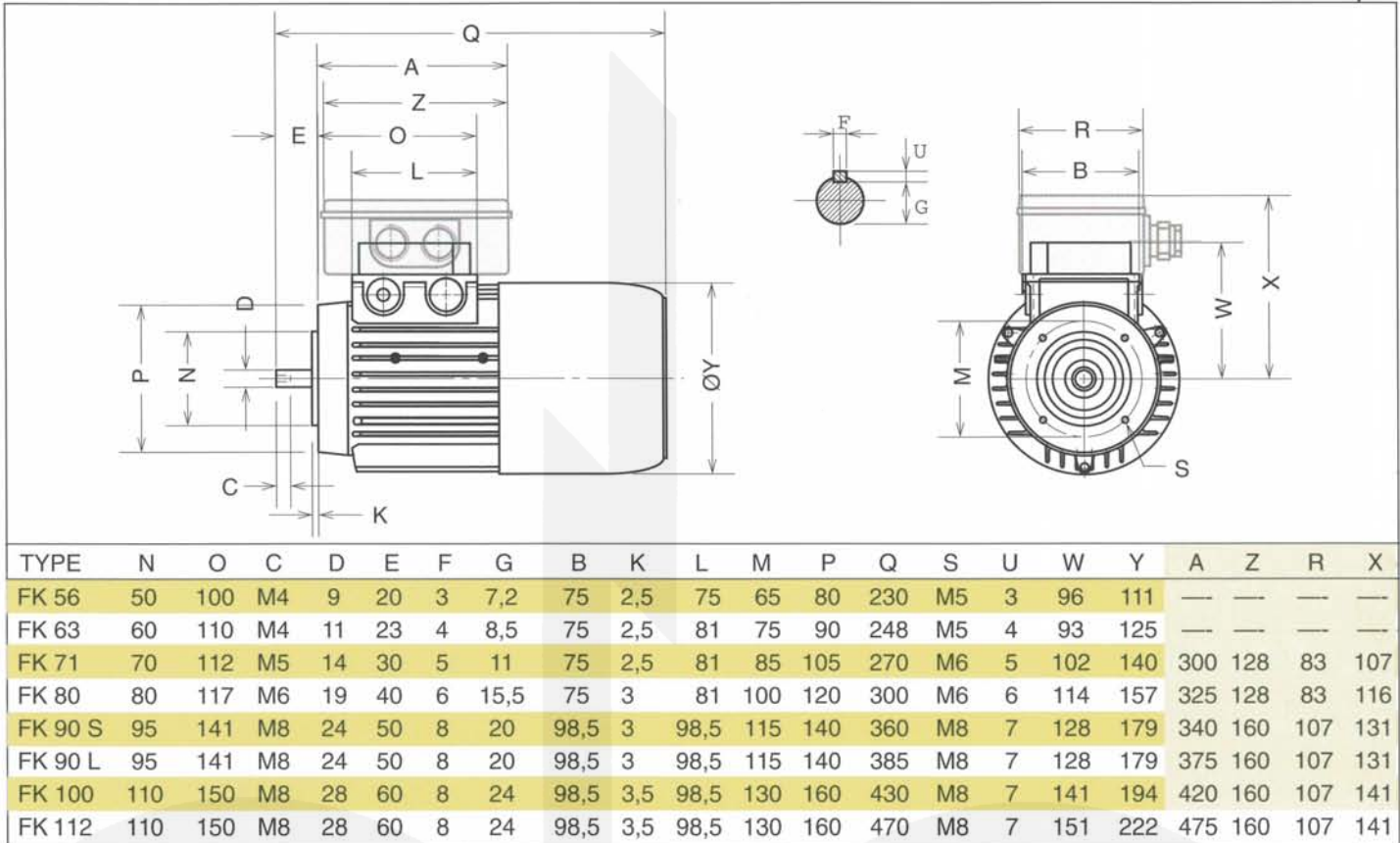
For tolerance values see table on page 2

Overall dimensions for the double boxes are indicated in the dimensions table for B14 constructive form

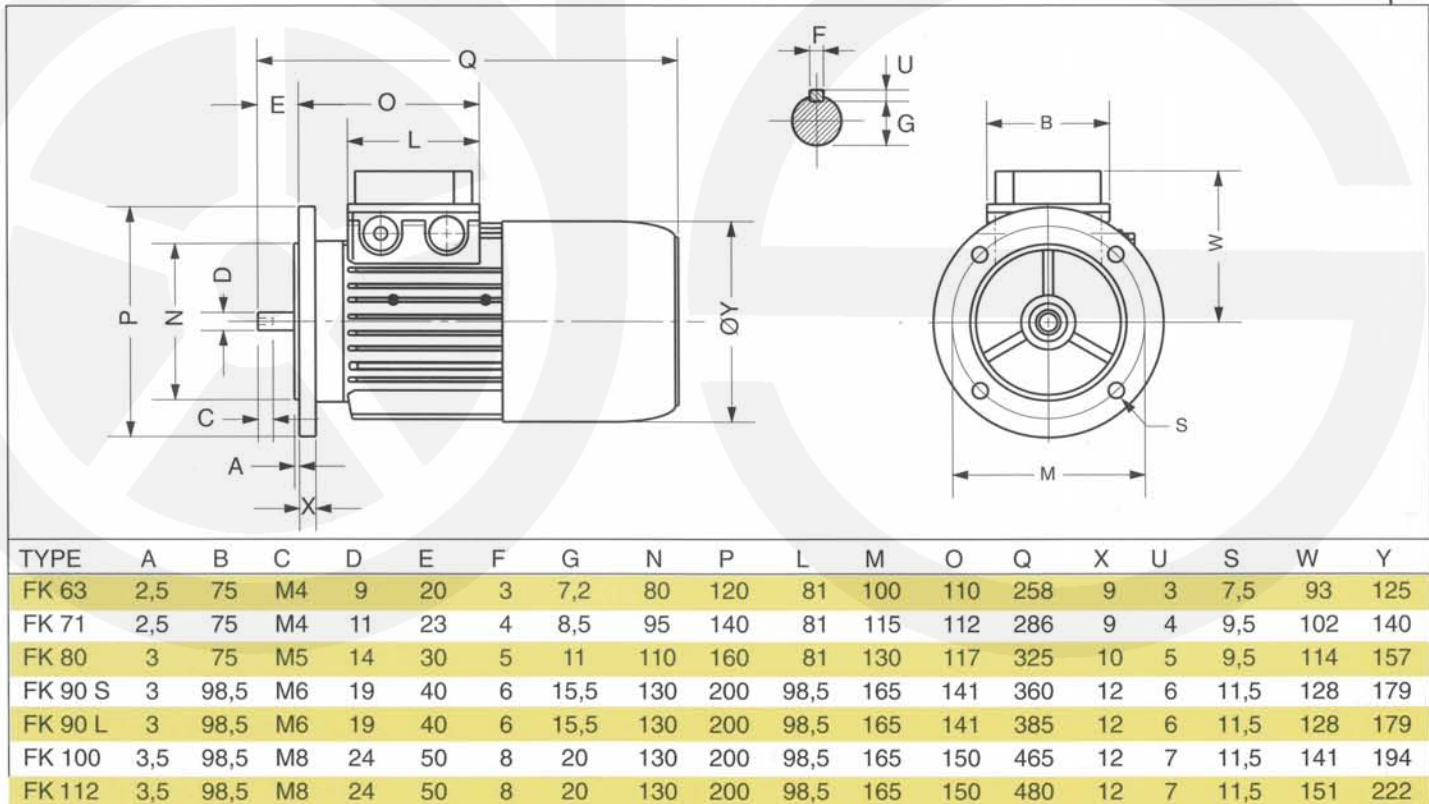
## Overall dimensions

The double box is available upon request for all motor series

### B 14 CONSTRUCTIVE FORM



### REDUCED B 5 CONSTRUCTIVE FORM



N.B.: Cable press gland from 56 to 63: PG 11; dal 71 al 112: PG 16  
FOR TOLLERANCE VALUES SEE TABLE ON PAGE 2