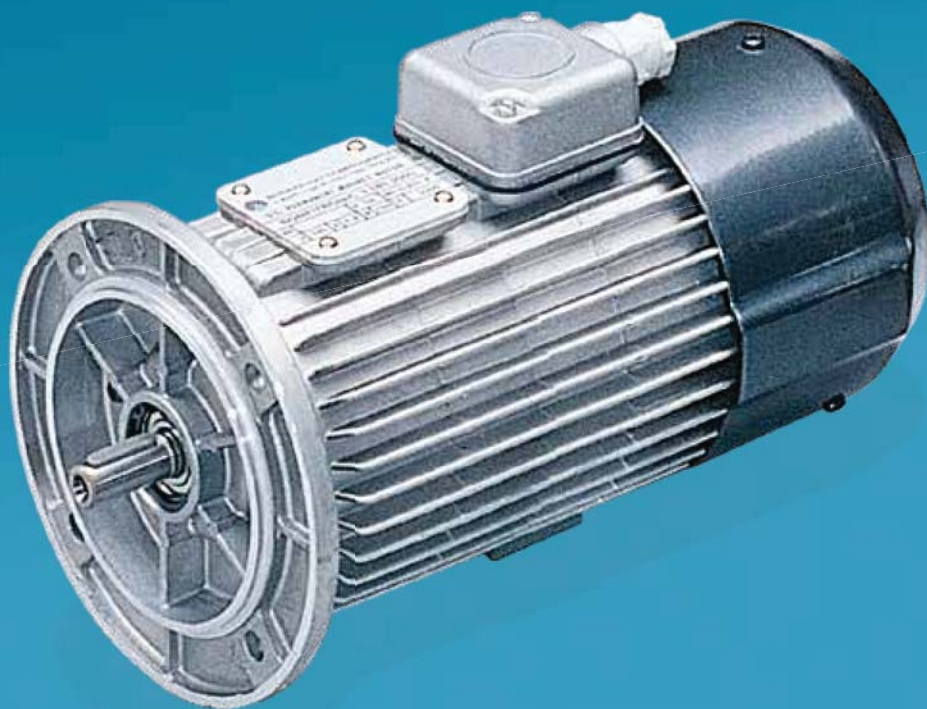


BC series

Motori in C.C.

DC electric motors



ACCESSORI - OPTIONALS

DINAMO TACHIMETRICA - TACHO GENERATOR

Tipo dinamo Tacho type	Tipo motore Motor type	Esecuzione meccanica Mechanical configuration	F.E.M. a 1000 rpm E.M.F. at 1000 rpm	Ondulaz. totale Total ripple	N° poli N° of poles	Corrente max Max current A	Resistenza Resistance Ohm	Induttanza Inductance mH	Inerzia rot. Rotor inertia Kgm ²
AS 55/10	BC 140 BC 220 BC 310	albero cavo hollow shaft	10 V	≤ 3%	2	0.02	24	86	1.0 x 10 ⁻³
DT 40/75	BC 120 BC 240 BC 270	albero spogente con giunto extended shaft with coupling	7.5 V	≤ 4%	2	0.05	24.5	3.3	3.92 10 ⁻⁶

LE DIMENSIONI D'INGOMBRO DELLE VARIE SERIE DI MOTORI, SE EQUIPAGGIATI CON DINAMO TACHIMETRICA VARIANO COME SEGUE:
D.C. MOTOR OVERALL DIMENSIONS WHEN EQUIPPED WITH TACHO-GENERATOR:

Tipo motore Motor type	Quota N * Dimension N * + mm	Copriventola Ø Fan cover diameter mm
BC 120	N + 65	—
BC 140	N + 65	—
BC 220	N + 65	110
BC 240	N + 51	130
BC 270	N + 51	130
BC 310	N + 65	138

* Per la quota N vedere i disegni dei vari tipi di motori riportati nelle pagine.

* Dimension «N» changes according to the motor types as showed on the previous page.

FRENI - BRAKE

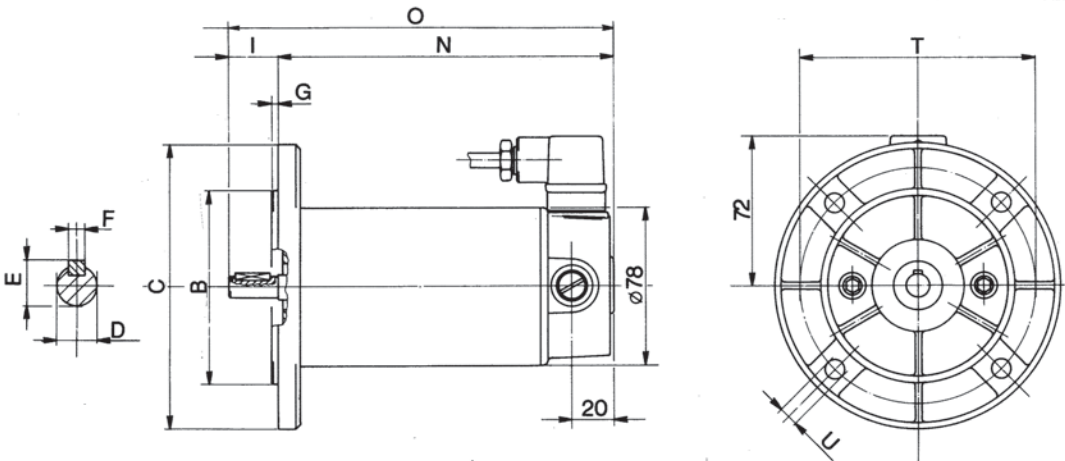
Tipo di motore Motor type	Tipo di freno Brake type	Coppia frenante Braking torque Nm	Tensione d'alimentazione Rated voltage VDC	Corrente assorbita Current A (25°C)	Potenza Power W	Inerzia Inertia Kgm ²
BC 140	FD 03	5	24	1	24	0.15 10 ⁻³
BC 220	56 PCC	2	24	0.6	15	0.69 10 ⁻⁴
BC 240	07- neg	5	24	1	24	0.15 10 ⁻³
BC 270	07- neg	7.5	24	0.5	12	0.65 10 ⁻⁴
BC 310	FD 03	5	24	1	24	0.15 10 ⁻³

VARIAZIONE DELLE DIMENSIONI STANDARD DEI MOTORI, SE EQUIPAGGIATI CON FRENO:
VARIATION OF MOTORS' STANDARD DIMENSIONS, WHEN FITTED WITH BRAKE:

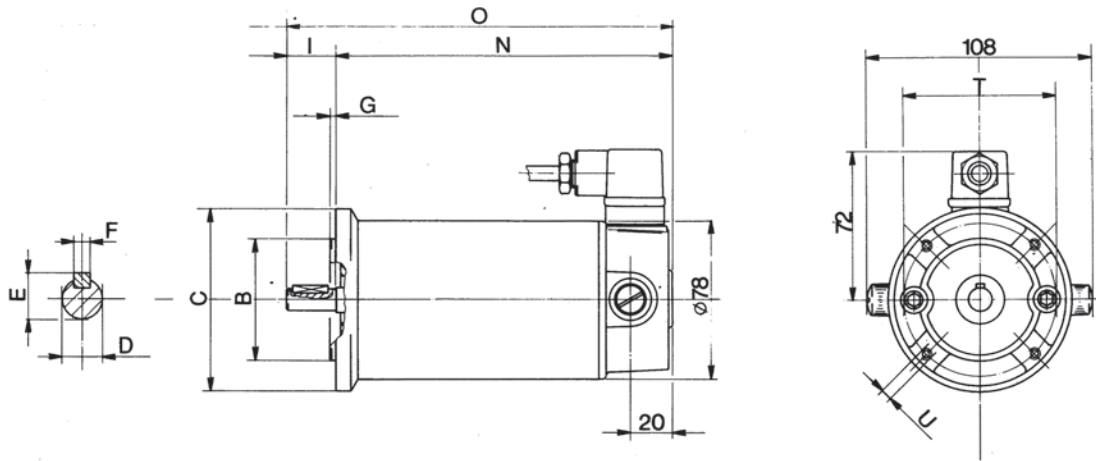
Tipo di motore Motor type	Quota < N > Dimension < N >	Diametro calotta copriventola Diameter of fan cowl
BC 140 BC 220 BC 240 BC 270 BC 310	N + 72 mm N + 40 mm N + 51 mm N + 51 mm N + 72 mm	110 mm 130 mm 130 mm 138 mm

BC110										
	U	n ₂	P ₂	M ₂	I _n	Ω	L	J		
	[V]	[rpm]	[W]	[Nm]	[A]	ohm	mH	Kgm ² •10 ⁻³	Kg	
BC110-180-3000-50	180	3000	50	0.16	0.4	31.5	70	0.3	2	a
BC110- 24-2800-90	24	2800	90	0.3	5	0.38	1.5	0.4	3.2	b
BC110-180-3000-90	180	3000	90	0.3	0.6	14.7	40	0.4	3.2	b

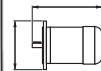
63 B5											
	D	B	C	I	E	F	G	N	O	T	U
a	11	95	140	23	12.5	4	3	133	156	115	9.5
b								163	186		



63 B14											
	D	B	C	I	E	F	G	N	O	T	U
a	11	60	90	23	12.5	4	2.5	133	156	75	M5
b								163	186		



BC120

	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	Ω ohm	L mH	J Kg·m ² ·10 ⁻³		
BC120- 12-1300-110	12	1300	110	0.8	14	0.18	1.26	0.5	4.5	a
BC120- 24-1500-110	24	1500	110		7					b
BC120- 48-1500-120	48	1500	120		3.4					b
BC120- 90-1300-110	90	1300	110		1.6	9.57	64.37			b
BC120- 24-2700-240	24	2700	240		14	0.18	1.26			a
BC120- 48-3000-240	48	3000			7					b
BC120- 90-3000-240	90	3000			3.4					b
BC120-180-2900-240	180	2900			1.6	9.57	64.37			b

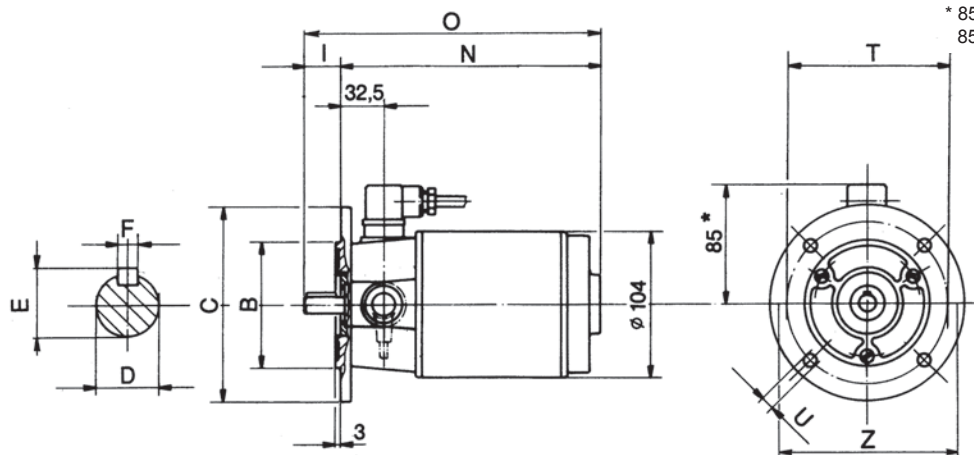
Questi motori possono essere forniti con attacco posteriore per volantino di posizionamento.

These motors are available with adaptor for positioning hand wheel on the back side.

63 B5

	D	B	C	I	E	F	N	O	T	U	Z
a	11	95	140	23	12.5	4	185	208	115	9.5	140
b											130

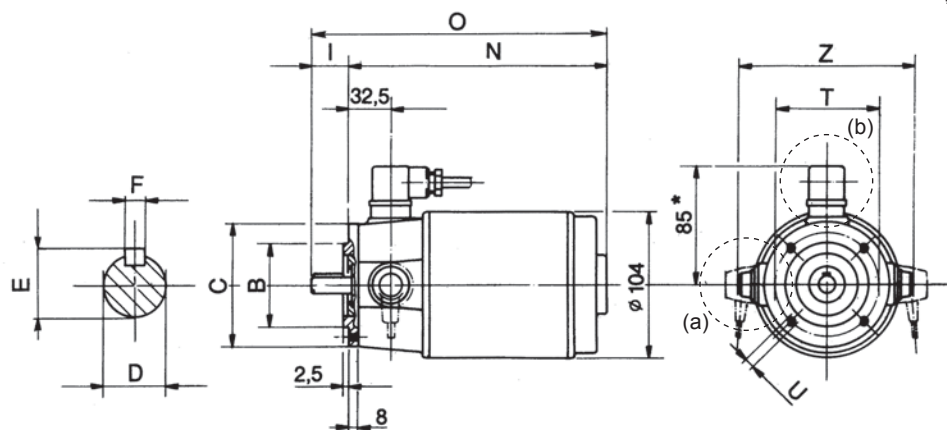
* 85 mm solo esecuzione (b)
85 mm only design (b)



63 B14

	D	B	C	I	E	F	N	O	T	U	Z
a	11	60	90	23	12.5	4	185	208	75	M5	140
b											130

* 85 mm solo esecuzione (b)
85 mm only design (b)



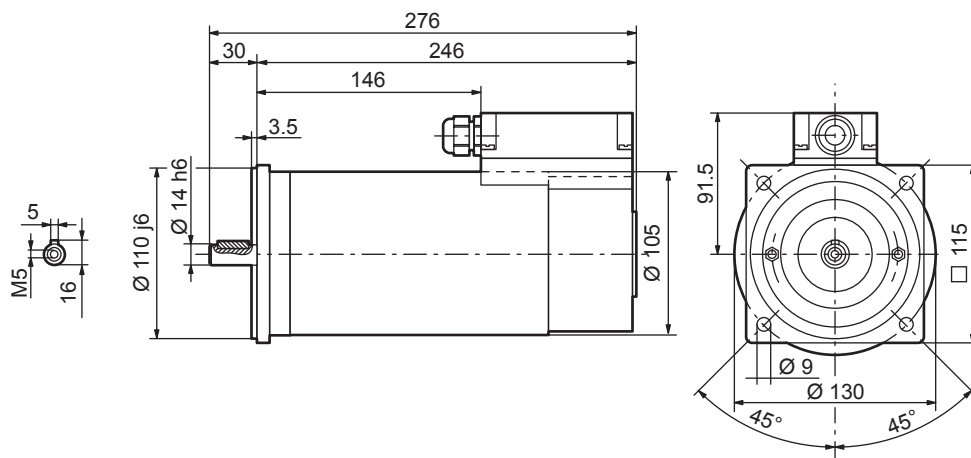
(a) esecuzione con Faston
(b) esecuzione con connettore

(a) design with Faston connectors
(b) design with terminal box

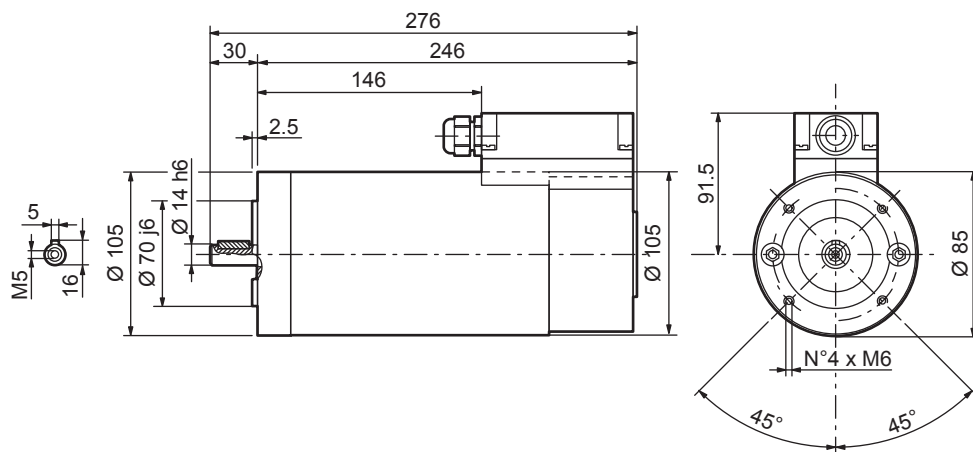
BC140

	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	Ω ohm	L mH	J Kgm ² •10 ⁻³	 Kg	
BC140- 24-1500-220	24	1500	220	1.4	13	0.32	1.6	1.2	7.8	a
BC140- 36-1500-220	36				8.7	0.54	3.2			
BC140- 48-1500-220	48				6.5	0.95	5.2			
BC140- 65-1500-220	65				4.5	1.5	9			
BC140-110-1500-220	110				2.9	3.4	24			
BC140-180-1500-220	180				1.8	7.4	56			
BC140- 24-2000-300	24	2000	300	1.4	16.4	0.22	0.5	1.2	7.8	a
BC140- 36-2000-300	36				11	0.4	1.1			
BC140- 48-2000-300	48				8.2	0.5	1.9			
BC140- 65-2000-300	65				6.1	0.8	3.4			
BC140-110-2000-300	110				3.6	1.8	9.4			
BC140-180-2000-300	180				2.2	4.5	24			
BC140- 24-3000-450	24	3000	450	1.4	24.6	0.1	0.4	1.2	7.8	a
BC140- 36-3000-450	36				16.5	0.18	0.86			
BC140- 48-3000-450	48				12.3	0.25	1.4			
BC140- 65-3000-450	65				9.1	0.35	2.6			
BC140-110-3000-450	110				5.4	0.9	7			
BC140-180-3000-450	180				3.3	2	18			

71 B5



71 B14



BC220

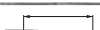
	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	Ω ohm	L mH	J Kgm ² •10 ⁻³		
BC220- 12-1500- 45	12	1500	45 *	0.29	5.5	1	3	0.33	2.6	a
BC220- 24-1500- 45	24				2.7	2.3	12			
BC220- 36-1500- 45	36				1.8	3.2	27			
BC220- 48-1500- 45	48				1.3	6	48			
BC220- 65-1500- 45	65				1	11	88			
BC220-110-1500- 45	110				0.6	18.8	252			
BC220-180-1500- 45	180				0.3	31	640			
BC220- 12-1500- 95	12		95	0.60	11	0.3	0.65	0.45	3.9	b
BC220- 24-1500- 95	24				5.5	0.75	2.6			
BC220- 36-1500- 95	36				3.7	1.25	6			
BC220- 48-1500- 95	48				2.8	1.74	10.6			
BC220- 65-1500- 95	65				2	2.6	19.4			
BC220-110-1500- 95	110				1.2	4.7	55			
BC220-180-1500- 95	180				0.7	7.8	145			
BC220- 12-1500-140	12		140	0.90	16	0.25	0.25	0.68	4.7	c
BC220- 24-1500-140	24				8	0.55	1			
BC220- 36-1500-140	36				5.5	0.85	2.25			
BC220- 48-1500-140	48				4	1.15	4			
BC220- 65-1500-140	65				3	1.6	7.4			
BC220-110-1500-140	110				1.7	2.7	21			
BC220-180-1500-140	180				1	4.3	57			
BC220- 12-2000- 60	12	2000	60 *	0.29	7	0.6	1.7	0.33	2.6	a
BC220- 24-2000- 60	24				3.5	1.3	6.8			
BC220- 36-2000- 60	36				2.3	2.3	12			
BC220- 48-2000- 60	48				1.7	3.2	22			
BC220- 65-2000- 60	65				1.3	5.8	62			
BC220-110-2000- 60	110				0.7	10	170			
BC220-180-2000- 60	180				0.4	17	450			
BC220- 12-2000-125	12		125	0.60	14	0.16	0.24	0.45	3.9	b
BC220- 24-2000-125	24				7	0.4	1			
BC220- 36-2000-125	36				4.7	0.68	2.2			
BC220- 48-2000-125	48				3.5	0.94	3.9			
BC220- 65-2000-125	65				2.6	1.34	7			
BC220-110-2000-125	110				1.5	2.42	20			
BC220-180-2000-125	180				0.9	4.1	54			
BC220- 12-2000-190	12		190	0.90	21	0.13	0.15	0.68	4.7	c
BC220- 24-2000-190	24				11	0.33	0.6			
BC220- 36-2000-190	36				7	0.53	1.3			
BC220- 48-2000-190	48				5.5	0.7	2.2			
BC220- 65-2000-190	65				4	0.93	3.9			
BC220-110-2000-190	110				2.3	1.65	11.2			
BC220-180-2000-190	180				1.4	2.6	30			
BC220- 12-3000- 90	12	3000	90 *	0.29	10	0.3	0.75	0.33	2.6	a
BC220- 24-3000- 90	24				5	0.66	3			
BC220- 36-3000- 90	36				3.3	1.3	6.8			
BC220- 48-3000- 90	48				2.5	2.3	12			
BC220- 65-3000- 90	65				1.8	3.2	22			
BC220-110-3000- 90	110				1.1	5.7	60			
BC220-180-3000- 90	180				0.6	10	170			
BC220- 12-3000-190	12		190	0.60	21	0.11	0.10	0.45	3.9	b
BC220- 24-3000-190	24				10	0.23	0.44			
BC220- 36-3000-190	36				7	0.4	0.95			
BC220- 48-3000-190	48				5	0.7	1.6			
BC220- 65-3000-190	65				3.8	1	2.9			
BC220-110-3000-190	110				2.2	1.8	8			
BC220-180-3000-190	180				1.4	3.1	21			
BC220- 12-3000-280	12		280	0.90	29	0.06	0.06	0.68	4.7	c
BC220- 24-3000-280	24				15	0.16	0.24			
BC220- 36-3000-280	36				10	0.28	0.56			
BC220- 48-3000-280	48				7	0.42	1			
BC220- 65-3000-280	65				5.5	0.64	1.9			
BC220-110-3000-280	110				3.2	1.18	5.5			
BC220-180-3000-280	180				1.9	2.1	14.8			

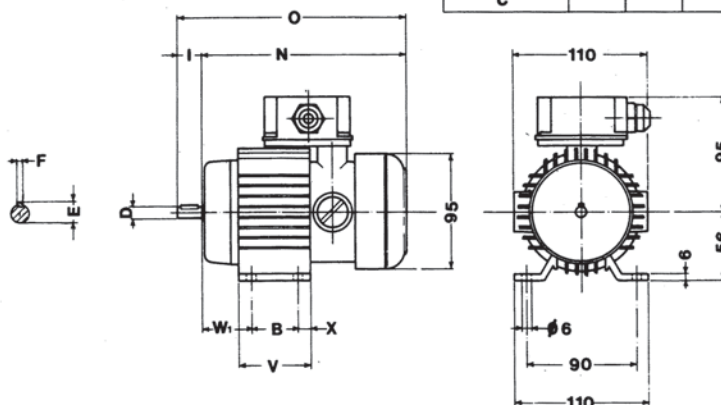
* Questi motori possono venire forniti con albero cavo ø7 e flangia standard per attacco al riduttore VF 27 (BC...VF27)

* These motors are also available with hollow shaft dia. 7mm and standard flange for gear box type VF 27 (BC...VF27)

63 B3

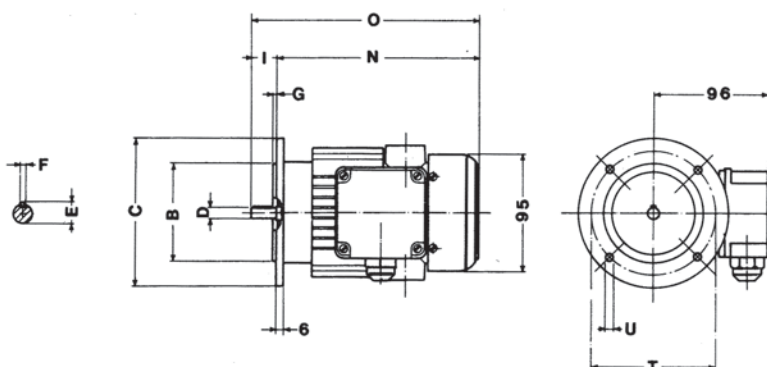
63 con altezza asse 56 mm
63 with shaft height 56 mm

	D	B	I	E	F	N	O	V	X	W ₁
a	11	45	23	12.5	4	164	187	57	6	36
b		71				203	226	96	19	36
c						236	259	129	52	36



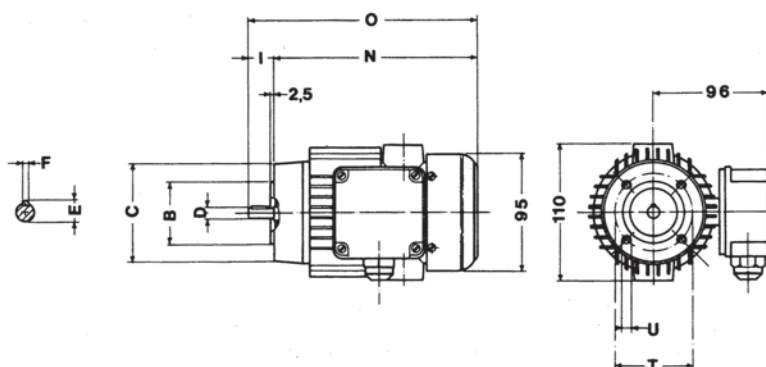
63 B5

	D	B	C	I	E	F	G	N	O	T	U
a	11	95	140	23	12.5	4	3	164	187	115	9.5
b								203	226		
c								236	259		



63 B14

	D	B	C	I	E	F	N	O	T	U
a	11	60	90	23	12.5	4	164	187	75	M5
b							203	226		
c							236	259		



Esecuzione con piedi (B3) è possibile anche in associazione con B5 e B14.

Foot mounted version (B3) also available in combination with flange version B5 or B14.

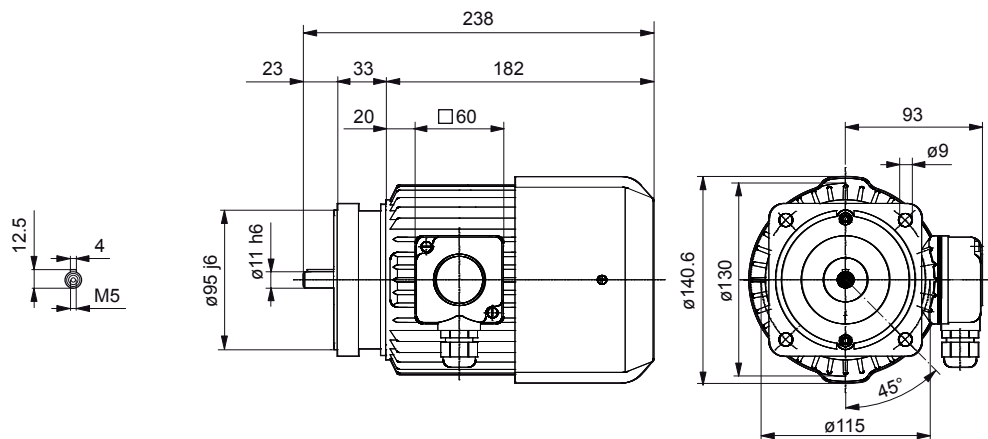
BC240

	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	Ω ohm	L mH	J Kgm ² •10 ⁻³	
BC240- 12-1500-180	12	1500	180	1.0	22	0.25	0.9	0.8	6.7
BC240- 24-1500-200	24		200	1.2	12	0.7	3.3		
BC240- 36-1500-200	36				8	1.5	7.4		
BC240- 48-1500-200	48				6	2.2	13		
BC240- 65-1500-200	65				4.4	3.5	24		
BC240-110-1500-200	110				2.6	9.5	68		
BC240-180-1500-200	180				1.6	21	140		

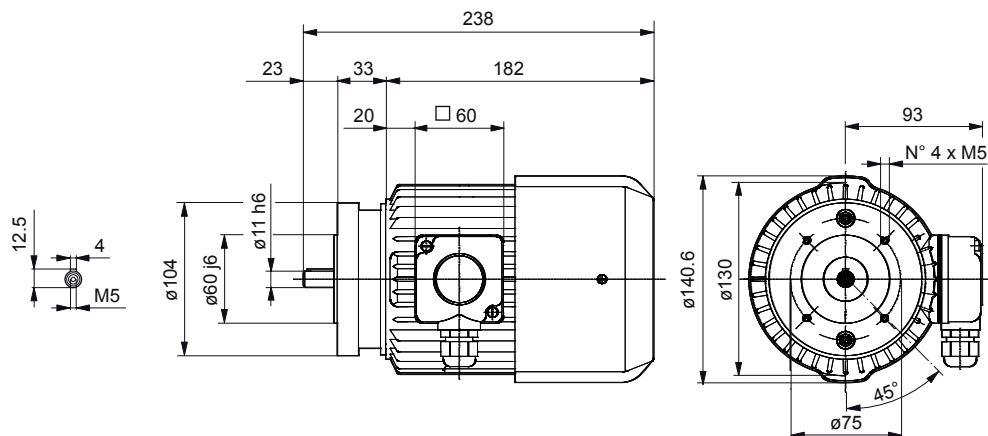
BC240- 12-2000-230	12	2000	230	1.0	27	0.04	0.5	0.8	6.7
BC240- 24-2000-260	24		260	1.2	16	0.1	1.7		
BC240- 36-2000-260	36				10	0.2	3.8		
BC240- 48-2000-260	48				7.7	0.32	6.6		
BC240- 65-2000-260	65				5.6	0.5	12		
BC240-110-2000-260	110				3.3	5	29		
BC240-180-2000-260	180				2	13	76		

BC240- 12-3000-320	12	3000	320	1.0	37	0.02	0.06	0.8	6.7
BC240- 24-3000-400	24		400	1.2	23	0.06	0.8		
BC240- 36-3000-400	36				16	0.1	1.6		
BC240- 48-3000-400	48				12	0.15	2.7		
BC240- 65-3000-400	65				8.5	0.22	4.7		
BC240-110-3000-400	110				5	0.45	13		
BC240-180-3000-400	180				3.1	5.5	32		

63 B5



63 B14

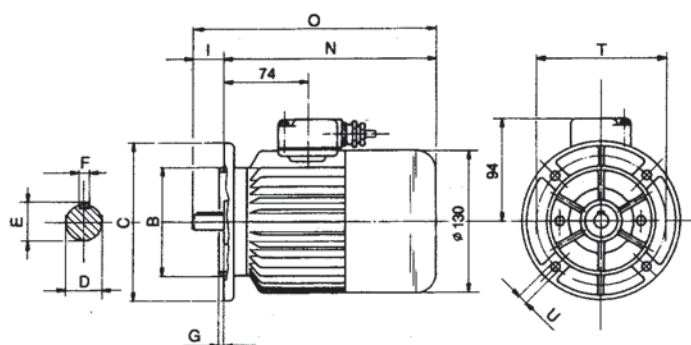


BC270

	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	Ω ohm	L mH	J Kg·m ² ·10 ⁻³	 Kg	
BC270- 12-1200-150	12	1200	150	1.3	22	0.16	0.93	0.5	5.6	a
BC270- 24-1400-150	24	1400	150		11					
BC270- 48-1500-200	48	1500	200		5					
BC270- 90-1200-170	90	1200	170		2.6	9.57	64.37			
BC270- 24-2900-370	24	2900	370		22	0.16	0.93			
BC270- 48-3000-370	48	3000	370		11					
BC270- 90-3000-370	90	3000	370		5					
BC270-180-2700-370	180	2700	370		2.6	9.57	64.37			
BC270- 12-1400-310	12	1400	310	2.2	40	0.056	0.31	0.95	9	b
BC270- 24-1400-370	24	1400	370		20					
BC270- 48-1500-370	48	1500	370		9					
BC270- 90-1400-370	90	1400	370		5.5	2.81	19.76			
BC270- 24-3100-750	24	3100	750		40	0.063	0.31			
BC270- 48-3000-750	48	3000	750		20					
BC270- 90-3000-750	90	3000	750		9					
BC270-180-3000-750	180	3000	750		4.9	2.81	19.76			

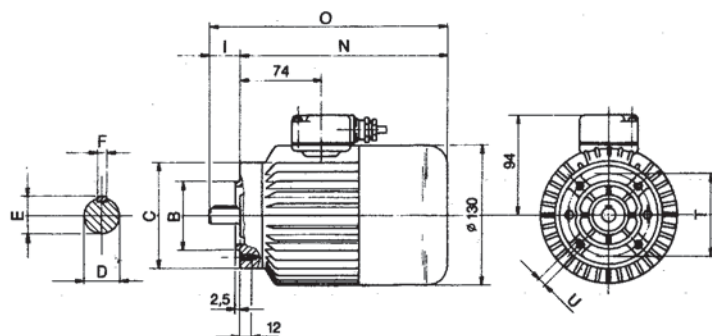
71 B5

	D	B	C	I	E	F	G	N	O	T	U
a	14	110	160	30	16	5	3.5	203	233	130	9.5
b								269	299		



71 B14

	D	B	C	I	E	F	N	O	T	U
a	14	70	110	30	16	5	203	233	85	M6
b							269	299		



BC310

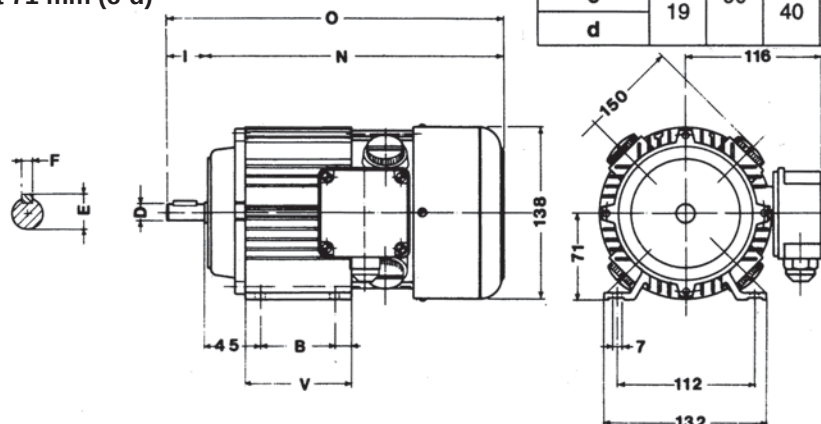
	U [V]	n ₂ [rpm]	P ₂ [W]	M ₂ [Nm]	I _n [A]	J Kg·m ² ·10 ⁻³		
BC310-12-1500-300	12	1500	300	1.9	33.2	1.5	7.2	a
BC310-24-1500-300	24				16.6			
BC310-36-1500-300	36				11			
BC310-48-1500-300	48				8.3			
BC310-12-1500-400	12		400	2.6	44	2.2	9.4	b
BC310-24-1500-400	24				22			
BC310-36-1500-400	36				14.6			
BC310-48-1500-400	48				11			
BC310-12-1500-600	12		600	3.8	67	2.9	11	c
BC310-24-1500-600	24				33.4			
BC310-36-1500-600	36				22			
BC310-48-1500-600	48				16.7			
BC310-12-1500-700	12		700	4.5	76	5	16	d
BC310-24-1500-700	24				38			
BC310-36-1500-700	36				25			
BC310-48-1500-700	48				19			
BC310-12-2000-400	12	2000	400	1.9	43	1.5	7.2	a
BC310-24-2000-400	24				21.5			
BC310-36-2000-400	36				14.3			
BC310-48-2000-400	48				10.3			
BC310-12-2000-550	12		550	2.6	59	2.2	9.4	b
BC310-24-2000-550	24				29.4			
BC310-36-2000-550	36				19.6			
BC310-48-2000-550	48				15			
BC310-12-2000-800	12		800	3.8	84	2.9	11	c
BC310-24-2000-800	24				42			
BC310-36-2000-800	36				28			
BC310-48-2000-800	48				21			
BC310-24-2000-950	24		950	4.5	52	5	16	d
BC310-36-2000-950	36				34			
BC310-48-2000-950	48				26			
BC310-12-3000-600	12	3000	600	1.9	64	1.5	7.2	a
BC310-24-3000-600	24				32			
BC310-36-3000-600	36				21			
BC310-48-3000-600	48				16			
BC310-12-3000-800	12		800	2.6	84	2.2	9.4	b
BC310-24-3000-800	24				42			
BC310-36-3000-800	36				22			
BC310-48-3000-800	48				20			
			1200	3.8		2.9	11	c
BC310-36-3000-1200	36				41			
BC310-48-3000-1200	48				31			
			1400	4.5		5	16	d
BC310-36-3000-1400	36				48			
BC310-48-3000-1400	48				36			

71 B3

80 B3

80 con altezza asse 71 mm (c-d)

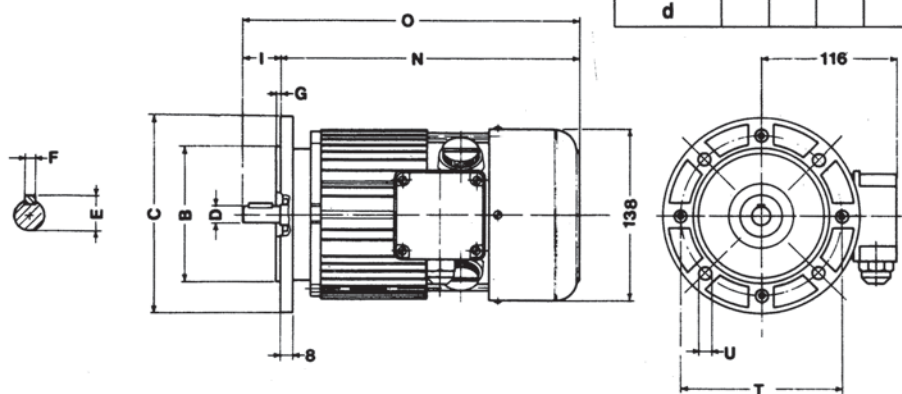
80 with shaft height 71 mm (c-d)



	D	B	I	E	F	N	O	V	X
a	14	60	30	16	5	237	267	83	12
b						269	299	115	14
c	19	90	40	21.5	6	304	344	150	49
d						347	387	193	92

71 B5

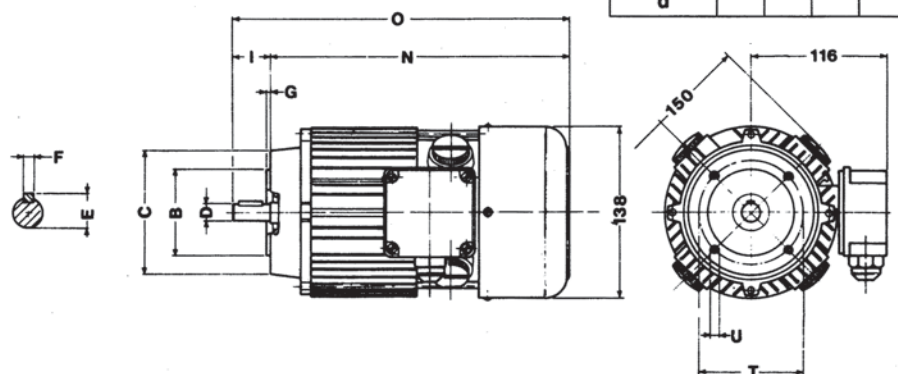
80 B5



	D	B	C	I	E	F	G	N	O	T	U
a	14	110	160	30	16	5	3.5	237	267	130	9.5
b								269	299		
c	19	130	200	40	21.5	6	3.5	317	357	165	11.5
d								360	400		

71 B14

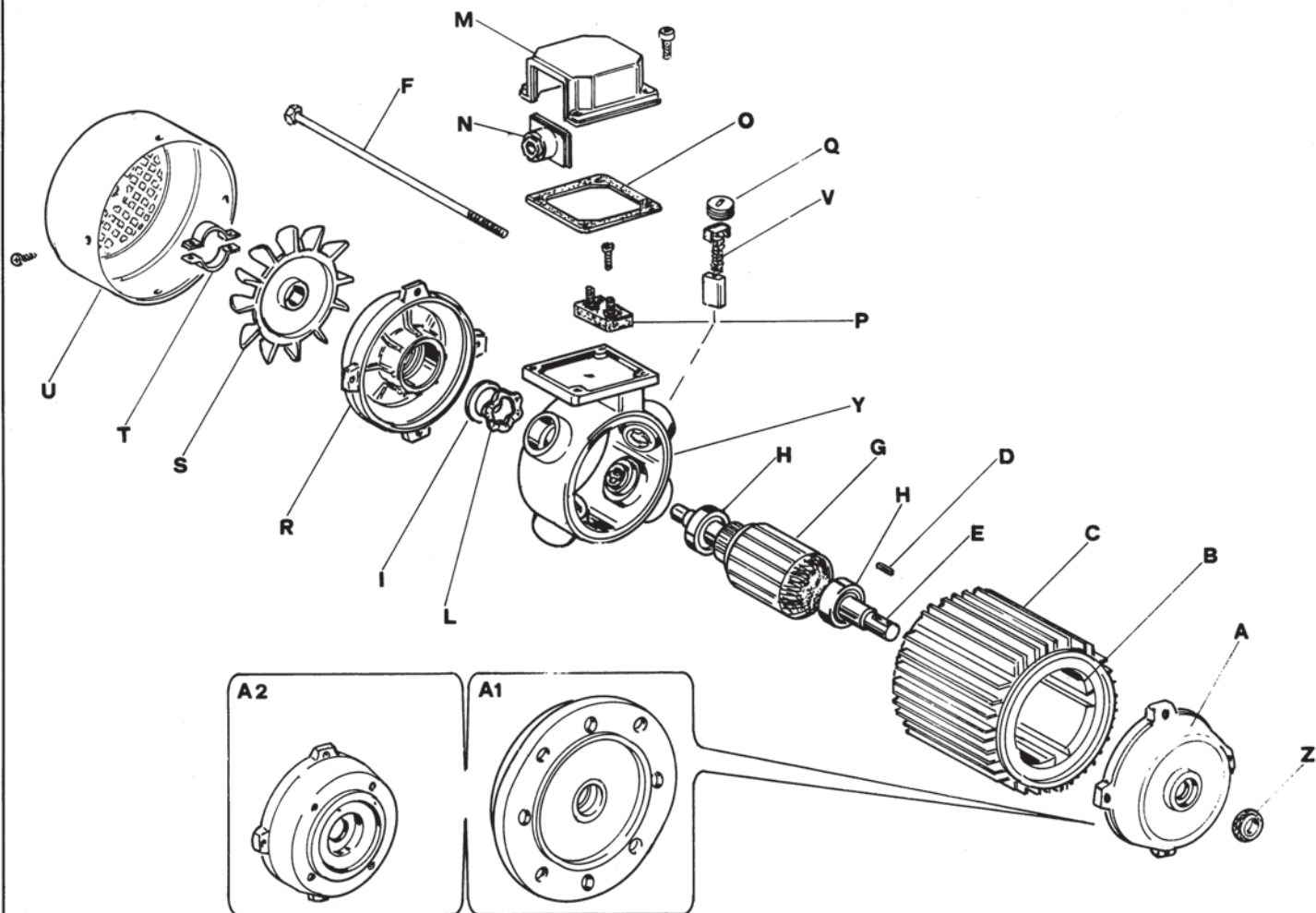
80 B14



	D	B	C	I	E	F	G	N	O	T	U
a	14	70	105	30	16	5	2.5	237	267	85	M6
b								269	299		
c	19	80	120	40	21.5	6	3	304	344	100	M6
d								347	387		

Esecuzione con piedi (B3) è possibile anche in associazione con B5 e B14.

Foot mounted version (B3) also available in combination with flange version B5 or B14.



A Scudo anteriore
A1 Flangia B5
A2 Flangia B14
B Statore magneti permanenti
C Carcassa Motore
D Linguetta
E Albero Motore
F Tirante
G Rotore
H Cuscinetto
I Anello di rasamento
L Anella di Compensazione

M Coprimorsettiera
N Pressacavo
O Guarnizione
P Morsettiera e Componenti
Q Tappo
R Scudo Posteriore
S Ventola di Raffreddamento
T Fascetta Stringiventola
U Copriventola
V Spazzola
Y Anello porta spazzole
Z Anello di tenuta

A Shield
A1 Flange B5
A2 Flange B14
B Winded Stator Permanent Magnet
C Motor Frame
D Tang
E Motor Shaft
F Tie-rod
G Cage Rotor
H Bearing
I Spacer ring
L Shackle

M Terminal Board Box
N Cable Gland
O Seal
P Terminal Board with Metallic Parts
Q Brush-Cover
R Back Side Shield
S Cooling Fan
T Fan-clamp
U Fan Cover
V Brush
Y Brush-Holder ring
Z Grommet

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