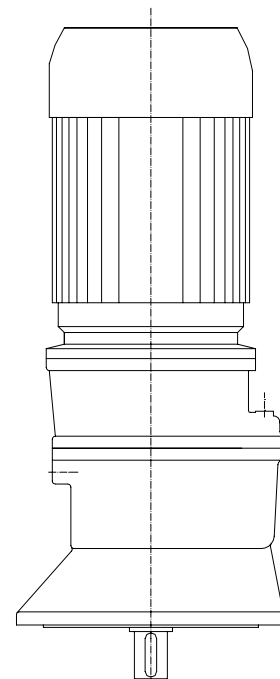
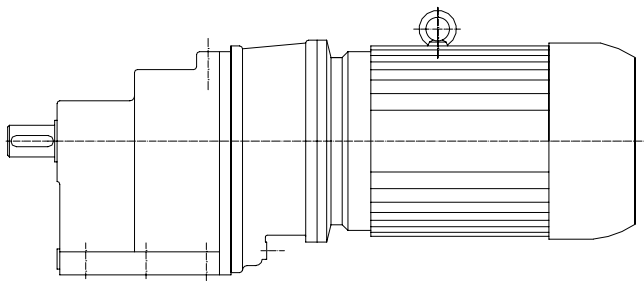


2 & 3 STEP HELICAL GEARED MOTORS

MOTOREDUCTOARE CILINDRICE IN 2 SI 3 TREPTE



CARACTERISTICI GENERALE

Motoreductoarele se pot utiliza in urmatoarele conditii:

- sensul de rotatie al arborelui de intrare: indiferent;
- turatie arborelui de turatie mare: max. 1500 rot/min;
- numarul de porniri-opriri: max.6/ora;
- temperatura mediului ambinat: -33°...+45°C;
- umiditatea normala a mediului: max.80% la 20°C (STAS 6692-83);
- Motor electric tip B5:
- turatie: 750;1000;1500 rot/min;
- tensiune alimentare: 380/220V la 50Hz;
- tipuri: ASI; ASA (Ex); ASFM (cu frina inglobata); de curent continuu si alte tipuri.
- caracteristici tehnice si dimensiuni conf.tab. 3,4,5 si 6.
- variante de montaj conf. tab.2.

Angrenajele se ung cu ulei prin barbotare.

Lagarele se ung cu ulei sub presiune furnizat de pompe integrate ,pentru variante verticale .

Tipul uleiului este aditivat mineral cu indice de viscozitate echivalent ISO VG 100 iarna si ISO VG 320 vara.

ALEGEREA MARIMII MOTOREDUCTORULUI

Marimea constructiva a unui motoreductor se stabileste astfel incit sa se respecte conditia:

- $P_m \geq P_e$ in care: $P_e = P_n \times C_s / \eta$
 - P_m = puterea motorului, Kw
 - P_e = puterea echivalenta la intrare, Kw
 - P_n = puterea nominala de transmis
 - C_s = coeficientul de serviciu (tabel 1)
 - η = randamentul motoreductorului sau
- se alege: 0,95 cu 2trepte
0,90 cu 3trepte

GREUTATI MAXIME;
MAX. WEIGHT [kg]

Motoreductoare cu angrenaje cilindrice / Cylindrical motor- gears

Marime Size	2G-B	2I-B	2L-B	2N-B	2O-B	2P-B	2R-B	2S-B	3L-B	3N-B	3O-B	3R-B	3T-B	3U-B
kg	30	75	120	290	370	460	550	780	97	210	310	400	740	920

GENERAL CHARACTERISTICS

The motor-gear units can be used in the following conditions:

- hand of rotation of the input shaft: any;
- speed of the input shaft: max. 1500 rpm;
- number of start-stop cycles: max. 6/hour;
- temperature of the atmosphere: -33°...+45°C;
- normal humidity of the atmosphere: max. 80% at 20°C;
- Electric motor B5 type:
- speeds: 750;1000;1500 rpm;
- supply voltage: 380/220V at 50Hz;
- type ASI; ASA (Ex); ASFM; d.c.
- technical characteristics overall & clamping dimensions shown in tables 3,4,5 and 6.
- and mounting variants as per tables 2.
- Lubrication oil under pressure, by integrated pumps.

The oil to be used is mineral oil additivated, with the viscosity index equivalent to ISO VG 100 in winter and ISO VG 320 in summer

MOTOR- GEAR SELECTION

The constructive size of a motor gear is chosen so that the condition:

- $P_m \geq P_e$ be respected, where: $P_e = P_n \times C_s / \eta$
- P_m = motor power, Kw
- P_e = puterea echivalenta la intrare, Kw
- P_n = nominal power, kW
- C_s = service factor (table 1)
- η = efficiency , or choose:
 - 0,95- for 2steps
 - 0,90-for 3steps

VALORILE COEFICIENTULUI DE SERVICIU C_s VALUES OF THE DUTY COEFICIENT C_s

Tabel / Table 1

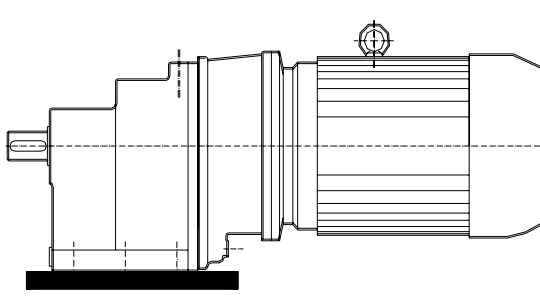
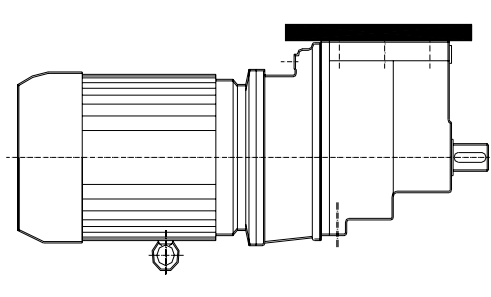
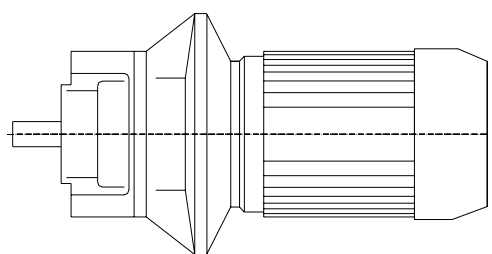
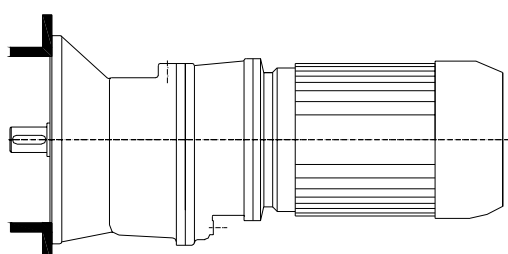
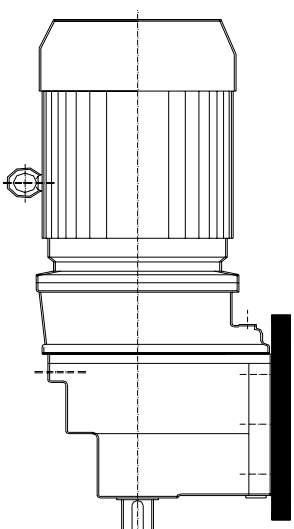
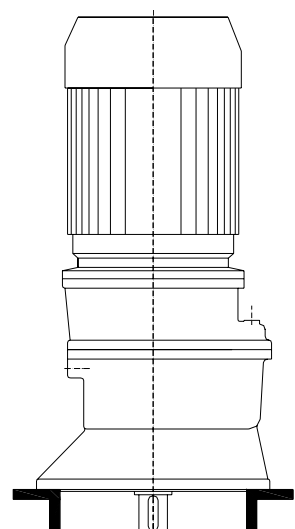
	Masina motoare Drivind unit	Durata de functionare: ore / zi Duty: hours / day	Categoria gradului de soc Category of the factor of duty		
			I	II	III
A	Motor electric Electric motor	pina la 3 up to 3	0,8	1	1,5
	Turbina Turbine	3 – 10	1	1,25	1,75
	Motor hidraulic Hydraulic	10 – 24	1,25	1,5	2
B	Motor cu 4 – 6 cilindri Four-six cylinder engine	pina la 3 up to 3	1	1,25	1,75
		3 – 10	1,25	1,5	2
		10 – 24	1,5	1,75	2,25
C	Motor cu 1 – 2 cilindri One-six cylinder engine	pina la 3 up to 3	1,25	1,5	2
		3 – 10	1,5	1,75	2,25
		10 – 24	1,75	2	2,5

SIMBOLIZARE / ORDERING CODE

	2		N-B	-	20	-	90	-	V05	-	IP-54	
Numar de trepte Number of steps		Marime Size									Grad protectie motor Motor protect. degree	
Rapotr de transmitere Transmition ratio											Varianta de montaj Mounting variant	
											Gabarit motor Motor clamping	

VARIANTE DE MONTAJ / MOUNTING VARIANTS

Tabel / Table 2

<p>H-01</p> 	<p>H-02</p> 
<p>H-03</p> 	<p>H-05</p> 
<p>V-03</p> 	<p>V-05</p> 

**CARACTERISTICI MOTOREDUCTOARE CU DOUA TREPTE
CHARACTERISTICS OF THE MOTORGears WITH TWO STEPS**

Putere / Power
Pm [kW]

Tabel / Table 3

Turatie motor Motor speed rmp	Turatie iesire Output speed rmp	Raport Ratio i	Marimea motoreductorului cu doua trepte / Size of the motor gear with two steps															
			2G-B		2I-B		2L-B		2N-B		2O-B		2P-B		2R-B		2S-B	
			Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor
1500	187	8	1,5	112	7,5	132	1,1	160	22	180	30	200	-	-	-	-		
			1,1	100	5,5	132	1,1	160	18,5	180	30	200	-	-	-	-		
	150	10	1,5	100	5,5	132	7,5	132	15	160	22	180	30	200	-	-		
			1,1	80	4	112			15	160	18,5	180	22	180	-	-		
	120	12,5	16	1,1	100	5,5	132	7,5	132	15	160	22	180	30	200	-	-	
				0,75	80	4	112			11	160	18,5	180	22	180	-	-	
93	16	16	1,1	100	4	112	7,5	132	11	160	15	160	22	180	30	200		
			0,75	80	3	100			7,5	132	11	160	18,5	180	22	180		
75	20	20	1,5	90	3	100	5,5	132	7,5	132	11	160	15	160	22	180		
			0,55	80	3	100			7,5	132	11	160	18,5	180	22	180		
62	16	16	1,5	100	3	132	5,5	132	7,5	160	7,5	160	15	180	22	200		
			1,1	90	2,2	112			5,5	132			11	160	11	160	22	200
50	20	20	1,1	90	2,2	112	4	132	5,5	132	7,5	160	11	160	15	180		
			0,75	90	2,2	112			4	132			7,5	160	11	160	15	180
37	20	20	0,37	100	1,5	112	3	132	4	160	5,5	160	7,5	160	-	-		

**CARACTERISTICI MOTOREDUCTOARE CU TREI TREPTE
CHARACTERISTICS OF THE MOTORGears WITH THREE STEPS**

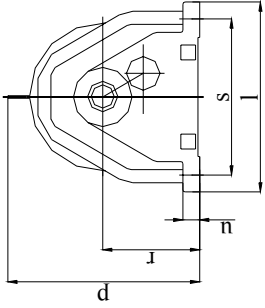
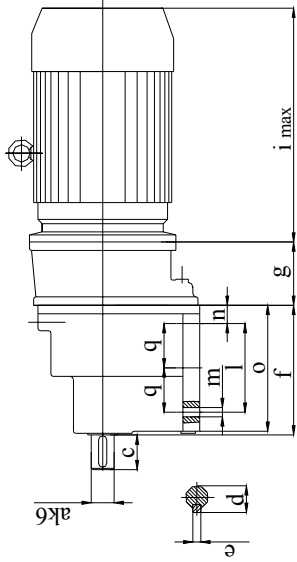
Putere / Power
Pm [kW]

Tabel / Table 4

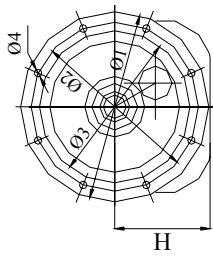
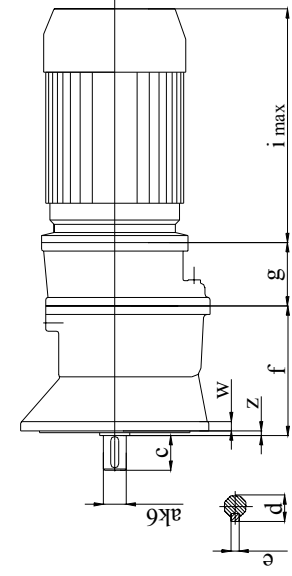
Turatie motor Motor speed rpm	Turatie iesire Output speed rpm	Raport Ratio i	Marimea motoreductorului cu trei trepte / Size of the motor gear with three steps											
			3L-B		3N-B		3O-B		3R-B		3T-B		3U-B	
			Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor	Putere [kW]	Gabarit motor
1500	33	45	1,5	90	3	100	4	112	7,5	22	180	200	30	
														18,5
	26	56	1,1	2,2	100	2,2	100	3	100	5,5	15	160	22	180
1000	17	56	0,75	90	1,5	100	2,2	112	4	7,5	160	160	11	
														1,5
	14	71	0,55	80	1,1	90	1,5	100	3	7,5	160	132	11	160
750	10	71	0,37	90	0,75	100	1,1	100	3	5,5	160	160	7,5	160

DIMENSIUNI DE GABARIT SI LEGATURA / OVERALL AND CLAMPING DIMENSIONS [mm]

Motoreductor cu talpa / Foot clamping



Motoreductor cu flansa / Flange clamping



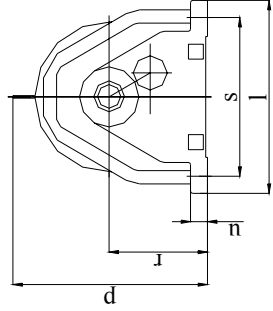
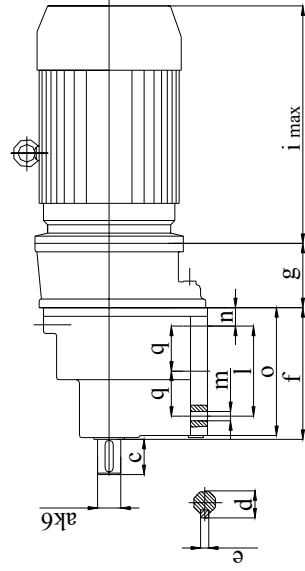
MOTOREDUCTOARE IN DOUA TREPTE / MOTOR – GEARS WITH TWO STEPS

Tabel / Table 5

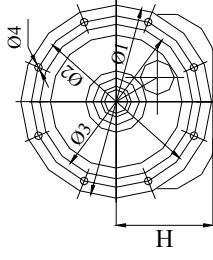
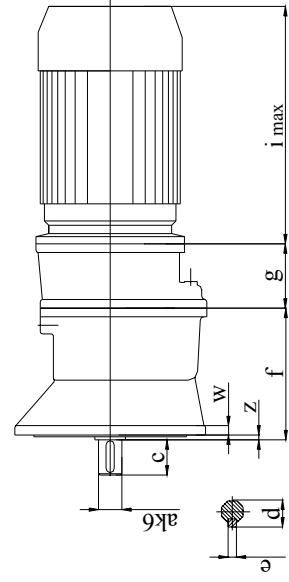
Marime Size	Motoreductor cu talpa / Foot clamping										Motoreductor cu flansa / Flange clamping													
	a	q	c	d	e	f	g	i max.	l	m	n	o	p	r	s	t	u	z	w	H	Ø1	Ø2	Ø3 j6	Ø4
2G-B	20	-	36	22,5	6	179,6	86	278	110	4xØ10	30	161	212	116	134	160	16	7,5	10	160	130	110	110	4x Ø10
2I-B	30	-	58	33	8	201	105	343	130	4xØ14	30	183	299	140	158	196	20	7,5	15	250	215	180	180	4x Ø12
2L-B	40	-	82	43,5	12	235	130	398	155	4xØ18	40	217	340	160	265	300	24	8	16	300	265	230	230	4x Ø14
2N-B	50	-	82	55	16	261	142	558	165	4xØ18	37	242	406	200	330	380	24	9	20	350	300	250	250	4x Ø18
2O-B	55	-	82	59	16	306,5	150	612	210	4xØ22	45	283	449	232	370	450	40	10	22	450	400	350	350	8x Ø18
2P-B	65	-	105	70	18	332	170	655	215	4xØ22	45	307	497	265	410	480	40	10	22	450	400	350	350	8x Ø18
2R-B	70	-	105	76	20	367	170	655	245	4xØ22	50	340	562	280	450	504	40	14	26	550	500	450	450	8x Ø18
2S-B	80	142	130	85	22	414	170	655	285	4xØ22	50	370	608	317	468	548	40	16	26	550	500	450	450	8x Ø18

DIMENSIUNI DE GABARIT SI LEGATURA / OVERALL AND CLAMPING DIMENSIONS [mm]

Motoreductor cu talpa / Foot clamping



Motoreductor cu flansa / Flange clamping



MOTOREDUCTOARE IN DOUA TREPTE / MOTOR – GEARS WITH TWO STEPS

Tabel / Table 6

Marim e Size	Motoreductor cu talpa / Foot clamping										Motoreductor cu flansa / Flange clamping					
	l	m	n	o	p	r	s	t	u	z	w	H	Ø1	Ø2	Ø3 j6	Ø4
3L-B	165	4xØ18	40	230	340	160	265	300	24	8	16	158	300	265	230	4x Ø14
3N-B	180	4xØ18	40	258	406	195	330	380	24	9	20	195	350	300	250	4x Ø18
3O-B	235	4xØ22	45	312	449	232	370	450	40	10	22	228	450	400	350	8x Ø18
3R-B	269	4xØ22	50	361	562	280	450	504	40	14	28	274	550	500	450	8x Ø28
3T-B	340	6xØ28	68	465	689	355	570	640	60	12	30	350	720	670	620	8x Ø22
3U-B	420	4xØ22	55	517	734	400	570	668	60	12	29	394	750	690	640	8x Ø22