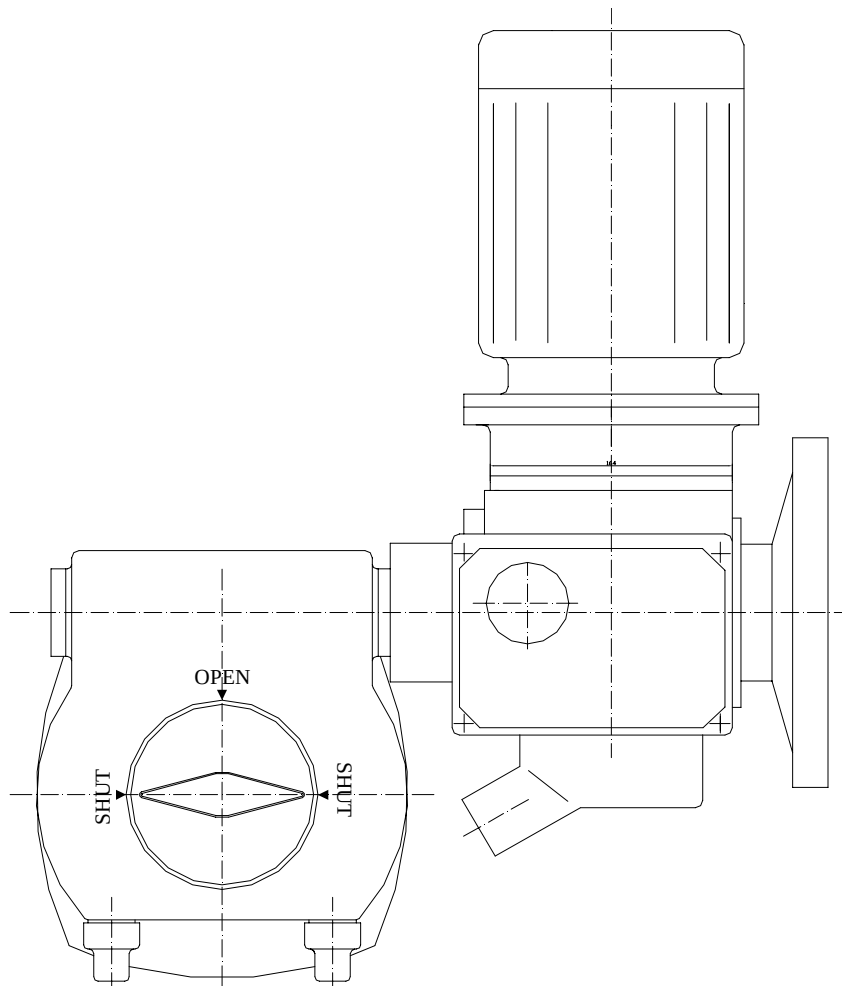


MECANISME ELECTRICE PENTRU ACTIONAREA ROBINETILOR SFERT DE TURA

ELECTRIC ACTUATORS FOR QUARTER-TURN VALVES

TIP/TYPE
NOTOR ST



44/2006-Rev.1

Mecanismele tip **NOTOR ST** si **NOTOR R ST** se folosesc pentru actionarea electrica a robinetelor industriale sfert de tura, precum si pentru alte aplicatii .

1. Conditii de utilizare a mecanismelor

- tensiuni de alimentare:
- standard: 380 V.
- la cerere: 220 V; 400 V; 500 V.
- frecventa retelei:
- standard: 50 Hz.
- la cerere: 60 Hz.
- numar maxim de porniri pe ora: **6** pentru **NOTOR ST**
:120...1200 pentru **NOTOR R ST**
- temperatura mediului ambiant:
- pentru mecanism:
- standard: -20°C.....+45°C.
- la cerere: -40°C.....+40°C.
- pentru cofretul electric:
- standard: -5°C.....+40°C.
- la cerere: -29°C.....+40°C.
- executie speciala pentru climat tropical umed **TH**, conform STAS 6692-83.
- puterea maxima a motorului electric: **4kW**.
- turatia motorului electric: **1500 rot/min**.
- gradul de protectie mecanica: **IP 54**.
- variante de executie:
- normala: **N**

2. Caracteristici constructive

Mecanismele tip **NOTOR ST** si **NOTOR R ST** includ urmatoarele subansamble de baza:

- mecanism multitura NOTOR A/C**
- reductor melcat** sfert de tura tip AMS

3.Caracteristici tehnice si dimensiuni conform fise anexate

NOTOR ST and **NOTOR R ST** electric actuators are designed to drive “quarter-turn” industrial valves or any other applications.

1. General operating conditions

- supply voltages:
- standard: 380 V.
- by request: 220 V; 400 V; 500 V.
- frequency:
- standard: 50 Hz.
- by request: 60 Hz.
- maximum number of starts/hour: **6-NOTOR ST**
:120....1200 for **NOTOR R ST**
- temperature of the ambient:
- for the actuator:
- standard: -20°C.....+45°C.
- by request: -40°C.....+40°C.
- for the power switch box:
- standard: -5°C.....+40°C.
- by request: -29°C.....+40°C.
- special **TH** manufacturing available, as per STAS 6692-83.
- maximum power of the electric motor: **4kW**.
- electric motor speed: **1500 rot/min**.
- mechanical enclosure degree: **IP 54**.
- manufacturing variants available:
 - for normal environment: **N**

2. Constructive features

NOTOR ST for **NOTOR R ST** type actuators include the following basic units:

- actuator NOTOR A/C**
- worm gear boxes** quarter turn typ AMS

3.Technical features according to technical sheet

MECANISM ACTIONARE ELECTRICA “SFERT DE TURA”
Lista componenta catalog mecanisme

rev.1

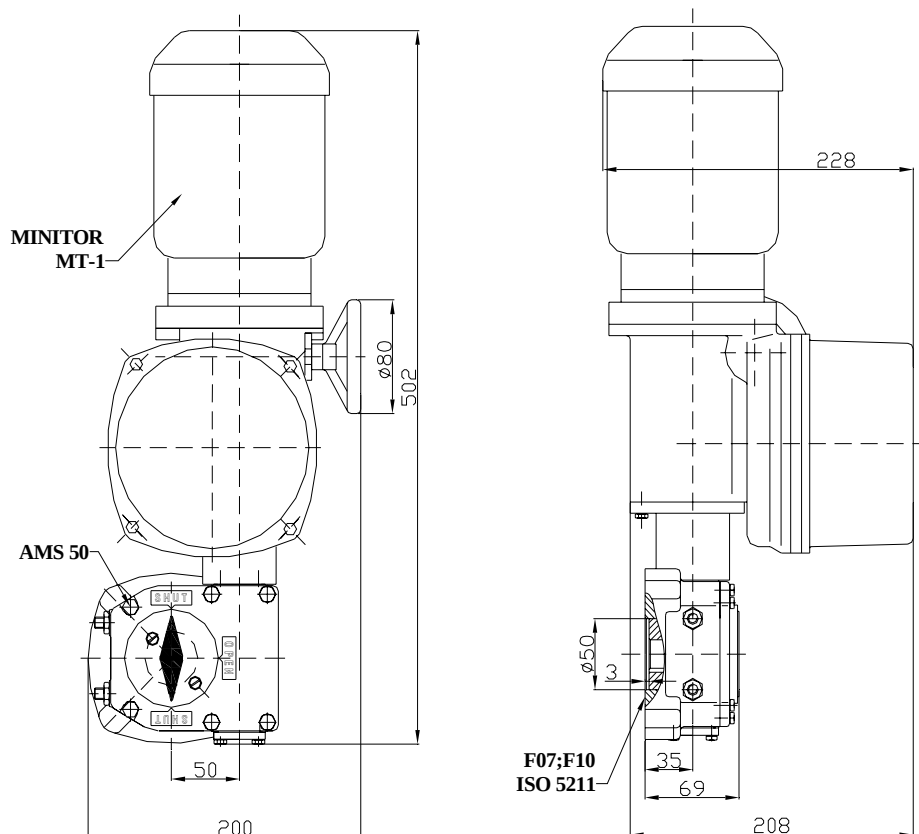
Crt nr.	Range Gama	Actuator Tip red.	Tech. sheet Nr.fisa the.	Date Data
1	Mecanisme de actionare a armaturilor industriale “SFERT DE TURA” tip NOTOR R ST si NOTOR ST	NR 3ST(N 3ST)	724a	01.09.2006
2		NR 4ST(N 4ST)	549a	04.09.2006
3		NR 5.2ST(N 5.2ST)	1031a	04.09.2006
4		NR 6ST(N 6ST)	514a	04.09.2006
5		NR 7ST(N 7ST)	728a	04.09.2006
6		NR 8ST(N 8ST)	729a	05.09.2006
7		NR 9ST(N 9ST)	661b	05.09.2006
8		NR 10ST(N 10ST)	1437b	06.09.2006
9		NR 11ST(N 11ST)	1438b	06.09.2006
10		NR 12ST(N 12ST)	99a	08.09.2006

MECANISM DE ACTIONARE ELECTRICA “SFERT DE TURA” NR 3 ST (N3ST)



1. Dimensiuni

NR.	724 a
Data	01.09.2006



2. Caracteristici Tehnice

- Moment iesire.....400 N.m
- Cursa.....90°
- Durata cursei..... 44 sec
- Tip motor.....pentru NR3ST-TAR
.....pentru N3ST-ASI
- Putere motor..... 0,12 kW
- Turatie motor.....1500 rot/min
- Prindere tip ISO 5211.....F07;F10
- Greutate.....11,8 kg

3. Simbolizare

NR3ST(N3ST) – 400 – 28 / 90 – 63 - F12 / 1 / 50 – A – 1E

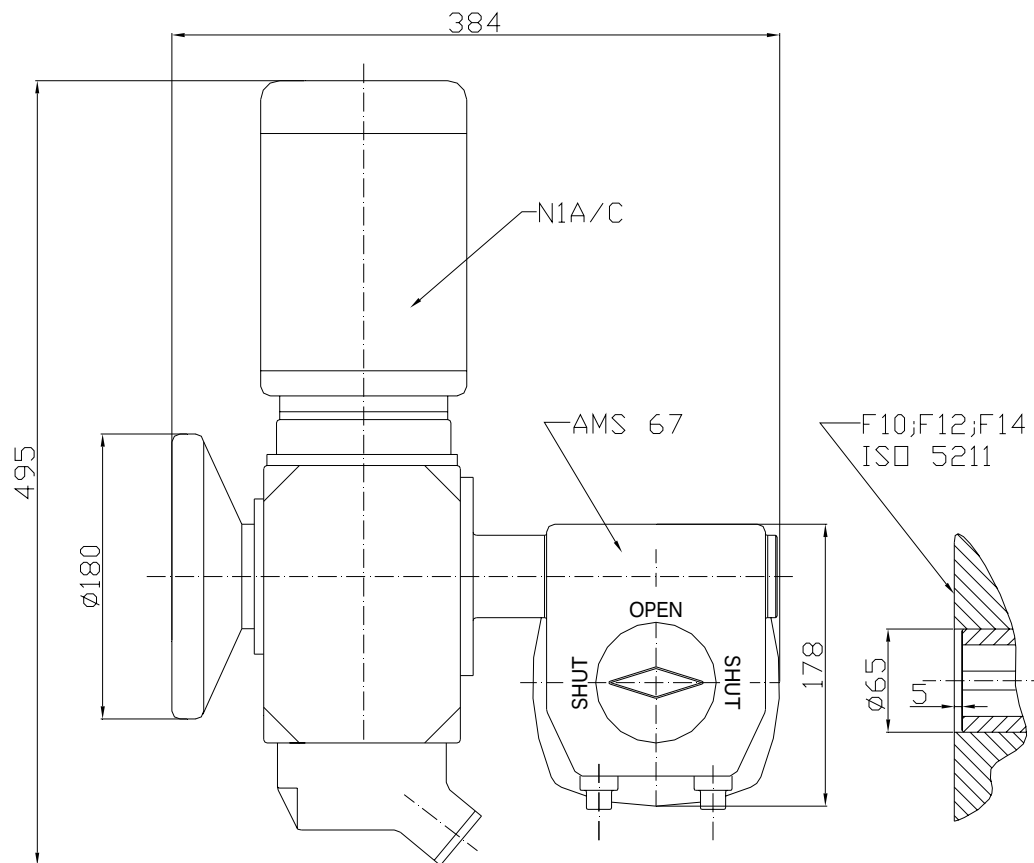
Tip si marime	Var. echipare
Moment iesire [N.m]	Poz. canal pana
Durata cursei [sec]	Cod dimensiune
Cursa [°]	Forma de antrenare
Gabarit motor	Flansa de prindere – ISO 5211

MECANISM SFERT DE TURA NR 4ST (N 4 ST)



1. DIMENSIUNI

NR.	549a
Data	04.09.2006



2. CARACTERISTICI TEHNICE

- Moment iesire.....800 N.m
- Cursa..... 90°
- Durata cursei.....14,6;26,4 sec
- Putere motor.....0,25;0,37 Kw
- Tip motor.....TAR-pentru NR 4ST
ASI- pentru N 4ST
- Turatie motor.....1500 rot/min
- Prindere tip ISO 5211.....F10;F12;F14
- Greutate.....25kg

3. SIMBOLIZARE

NR 4ST(N4ST) – 300 – 13,2 / 90 – 71 - F12 / 1 / 30 – A – 1E

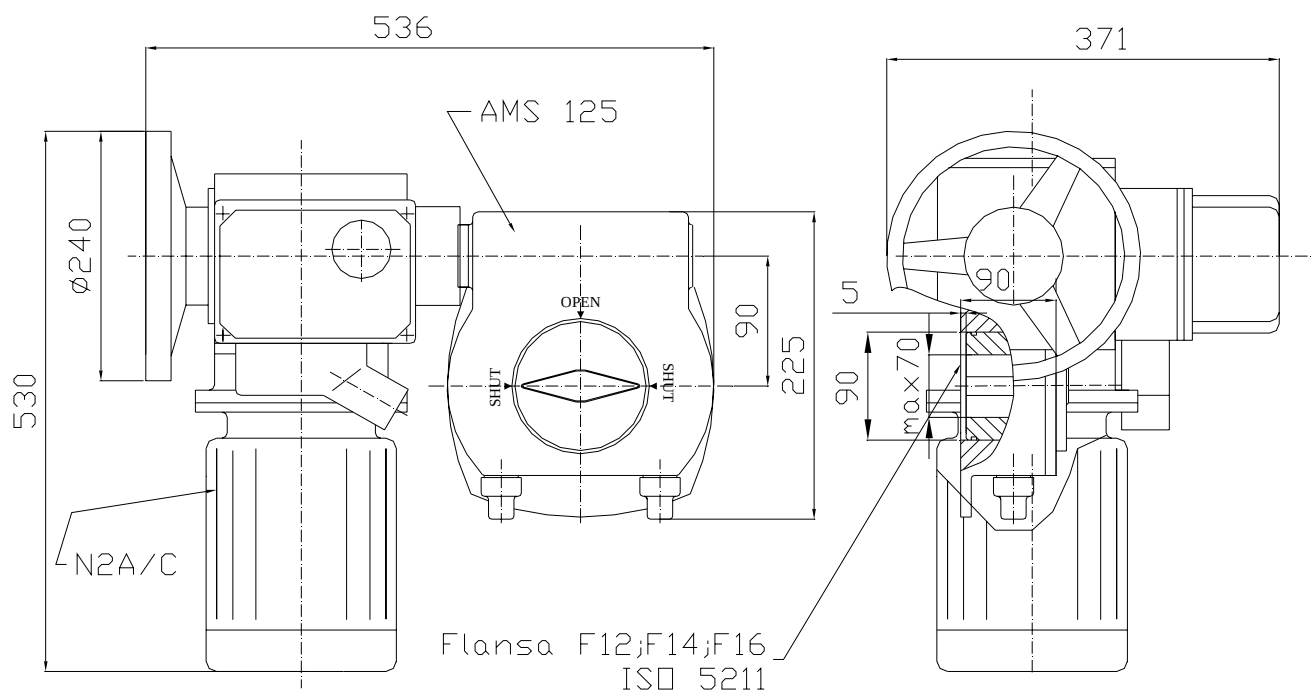
Tip si marime	Var. echipare
Moment iesire [N.m]	Poz. canal pana
Durata cursei [sec]	Cod dimensiune
Cursa [°]	Forma de antrenare
Gabarit motor	Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA “SFERT DE TURA
N R 5.2ST
(N 5.2ST)



NR.	1013a
Data	04.09.2006

1. Dimensiuni



2. Caracteristici

- Moment iesire.....1800 Nm
- Cursa.....90°
- Durata cursei..... 49 s
- Putere motor.....Pentru N R 5.2ST-0,8Kw
-Pentru N 5.2 ST-0,75 Kw
- Turatie motor.....1500 rot/min
- Tip motor:CM (asincron monofazat);ASI-pentru N5.2ST
-ASFM(asincron trifazat)-(120 actonari /ora) pentru NR5.2ST
- Prindere tip ISO 5211.....F12; F14;F16
- Greutate.....65kg

3. Simbolizare

NR 5.2ST(N5.2ST) – 1800 – 49 / 90 – 90 - F14 / 3 / 32 – – 3ET

Tip si marime		Var. echipare
Moment iesire [N.m]		Poz. canal pana
Durata cursei [sec]		Cod dimensiune
Cursa [°]		Forma de antrenare
Gabarit motor		Flansa de prindere – ISO 5211

MECANISM SFERT DE TURA

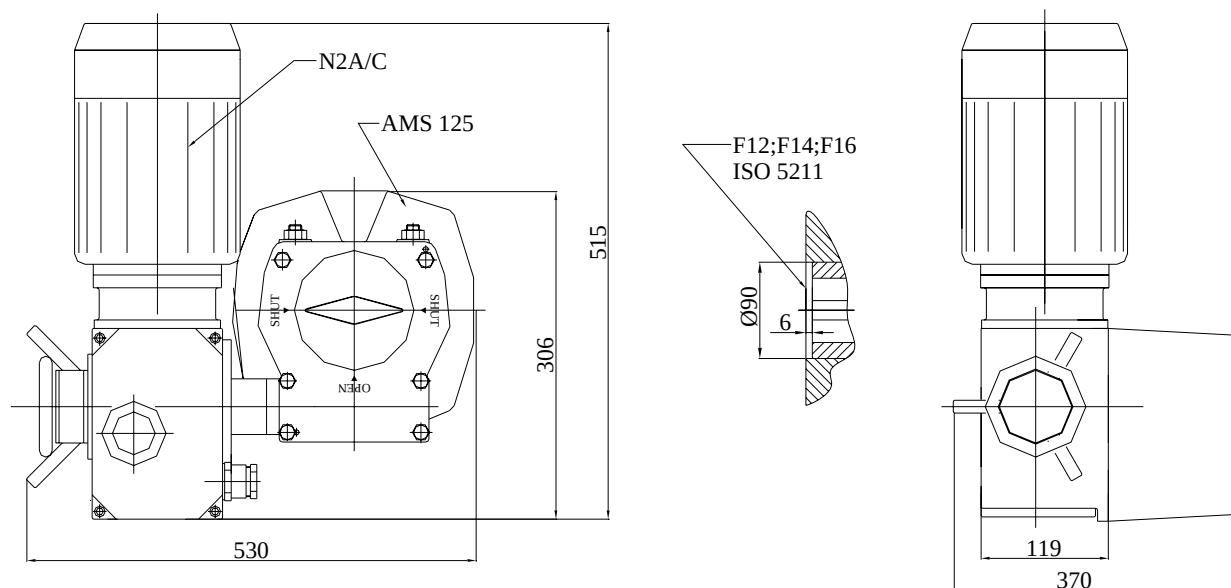
NR 6ST

(N 6 ST)



NR.	514a
Data	04.09.2006

1. DIMENSIUNI



2. CARACTERISTICI TEHNICE

- Moment iesire.....2500 N.m
- Cursa.....90°
- Durata cursei.....37,5 sec
- Tip motor.....TAR-pentru NR 6ST
- ASI-pentru N6ST
- Putere motor.....1,1 kW
- Turatie motor.....1500 rot/min
- Prindere tip ISO 5211.....F12;F14;F16
- Greutate.....70kg

3. SIMBOLIZARE

NR 6ST(N6ST) – 2500 – 37,5 / 90 – 90 - F12 / 1 / 30 – A – 1E

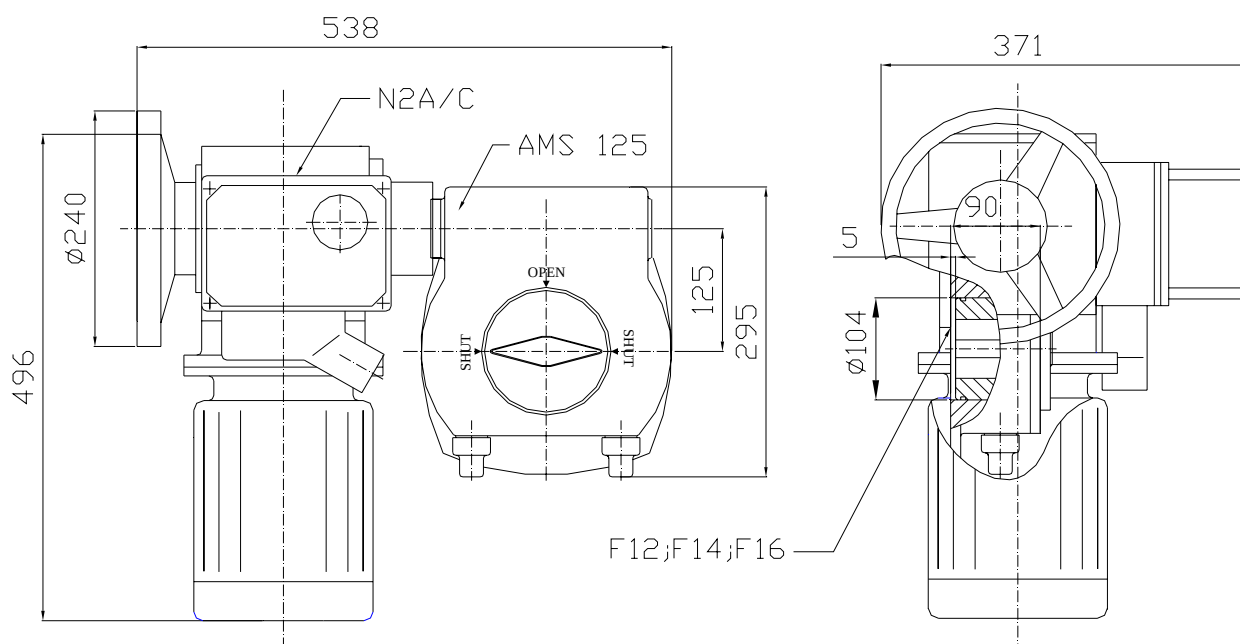
Tip si marime		Var. echipare
Moment iesire [N.m]		Poz. canal pana
Durata cursei [sec]		Cod dimensiune
Cursa [°]		Forma de antrenare
Gabarit motor		Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA “SFERT DE TURA NR 7ST (N 7 ST)



NR.	728a
Data	04.09.2006

1. Dimensiuni



2. Caracteristici Tehnice

- Moment iesire[N.m].....3200
- Cursa.....90°
- Durata cursei[sec]..... 43
- Tip motor.....TAR-pentru NR 7ST
ASI-pentru N 7ST
- Putere motor.....1,1 Kw
- Turatie motor[rot/min].....1500
- Prindere tip ISO 5211.....F12;F14;F16
- Greutate.....83kg

3. Simbolizare

NR 7ST(N7ST) – 3200 – 43 / 90 – 90 - F16 / 1 / 60 – A – 1E

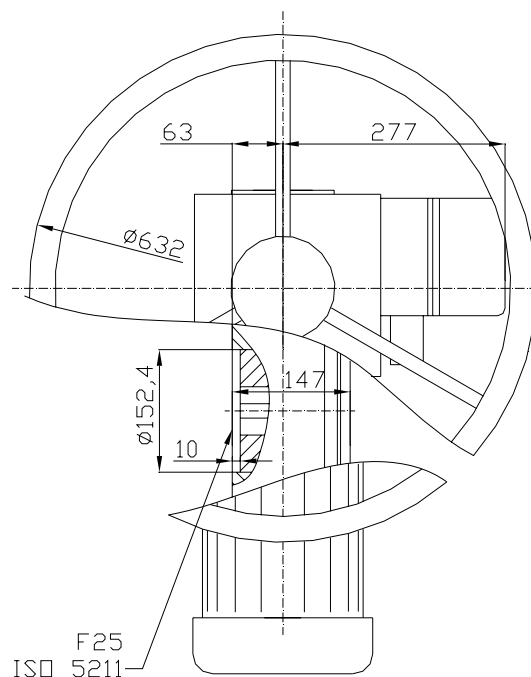
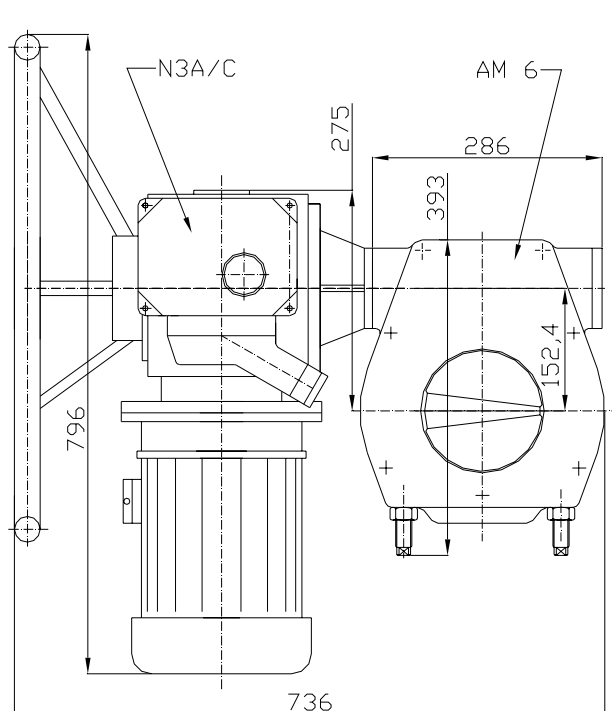
Tip si marime									Var. echipare
Moment iesire [N.m]									Poz. canal pana
Durata cursei [sec]									Cod dimensiune
Cursa [°]									Forma de antrenare
Gabarit motor									Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA “SFERT DE TURA NR 8ST (N 8 ST)



NR.	729a
Data	05.09.2006

1. Dimensiuni



2. Caracteristici Tehnice

- Moment iesire[N.m].....	4300	6000
- Cursa.....	90°	90°
- Durata cursei[sec].....	24	17
- Tip motor.....	ASI-pentru N 8ST ASFM-pentru NR 8ST	
- Putere motor[Kw].....	3 –pentru N 8ST 3,2-pentru NR8ST	
- Turatie motor[rot/min].....	1500	
- Prindere tip ISO 5211.....	F25	
- Greutate[kg].....	137	

3. Simbolizare

NR 8ST(N8ST) – 6000 – 17 / 90 – 100 - F25 / 1 / 60M – A – 1E

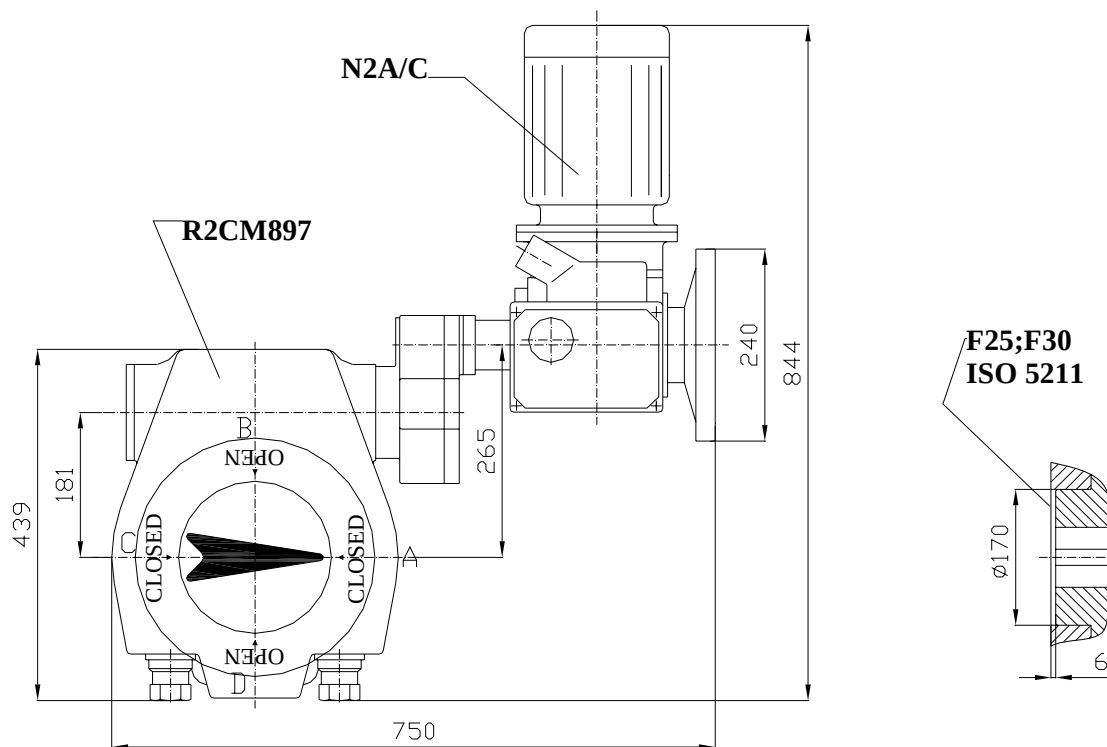
Tip si marime		Var. echipare
Moment iesire [N.m]		Poz. canal pana
Durata cursei [sec]		Cod dimensiune
Cursa [°]		Forma de antrenare
Gabarit motor		Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA "SFERT DE TURA NR 9ST (N 9 ST)



1. Dimensiuni

Nr	661b
Data	05.09.2006



2. Caracteristici tehnice

- Moment iesire..... 8000 | 6000 Nm
- Cursa.....90°
- Durata cursei.....63 sec
- Tip motor.....ASFM-pentru NR 9ST
ASI-pentru N 9ST
- Putere motor.....Pentru N 9ST...1,5 | 1,1 Kw
Pentru NR 9ST.....1,6 | 1,25 Kw
- Turatie motor.....1500 rot/min
- Flansa iesire ISO 5211.....F25
- Masa.....196 | 192 kg

3. Simbolizare :

NR 9ST(N9ST) - 8000 - 63 / 90 - 90 - F25 / 1 / 80 - A - 3E

Tip si marime									Var. echipare
Moment iesire [N.m]									Poz. canal pana
Durata cursei [sec]									Cod dimensiune
Cursa [°]									Forma de antrenare
Gabarit motor									Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA

“SFERT DE TURA

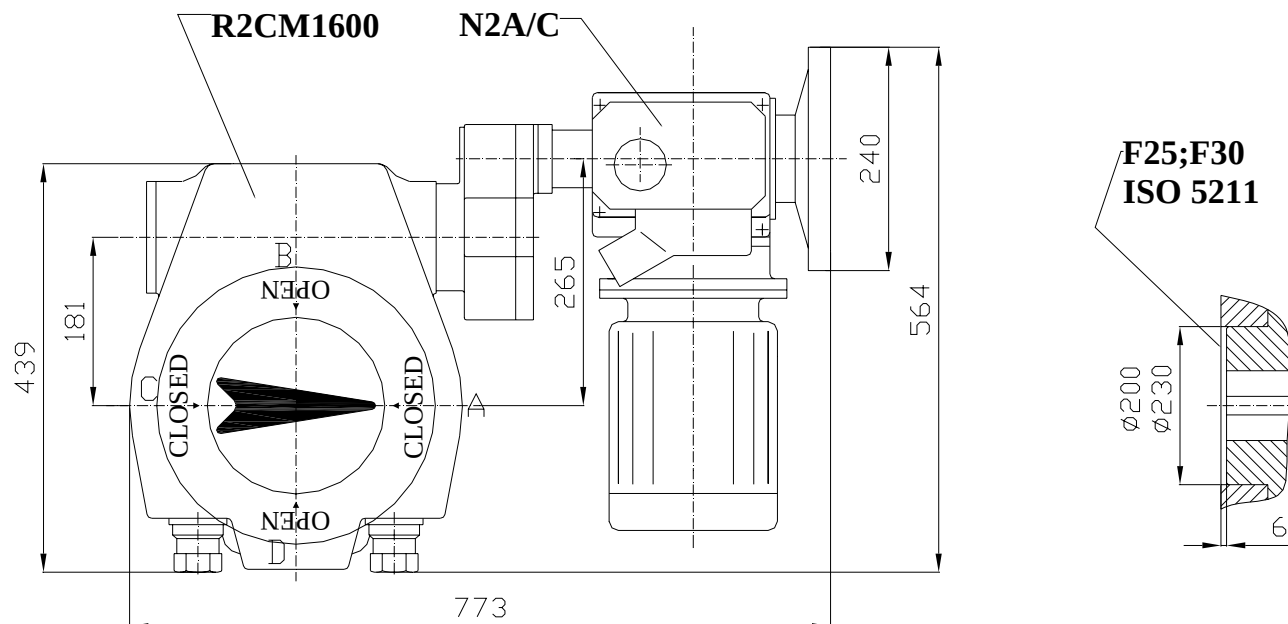
NR 10ST

(N 10ST)



1. Dimensiuni

Nr	1437b
Data	06.09.2006



2. Caracteristici tehnice

- Moment iesire.....10000 Nm
- Cursa.....90°
- Durata cursei.....114 sec
- Tip motor.....ASFm-pentru NR 10ST
- ASI-pentru N 10ST
- Putere motor.....Pentru N 10ST...1,5 Kw
- Pentru NR 10ST.....1,6 Kw
- Turatie motor.....1500 rot/min
- Flansa iesire ISO 5211.....F25
- Masa.....250 kg

3. Simbolizare :

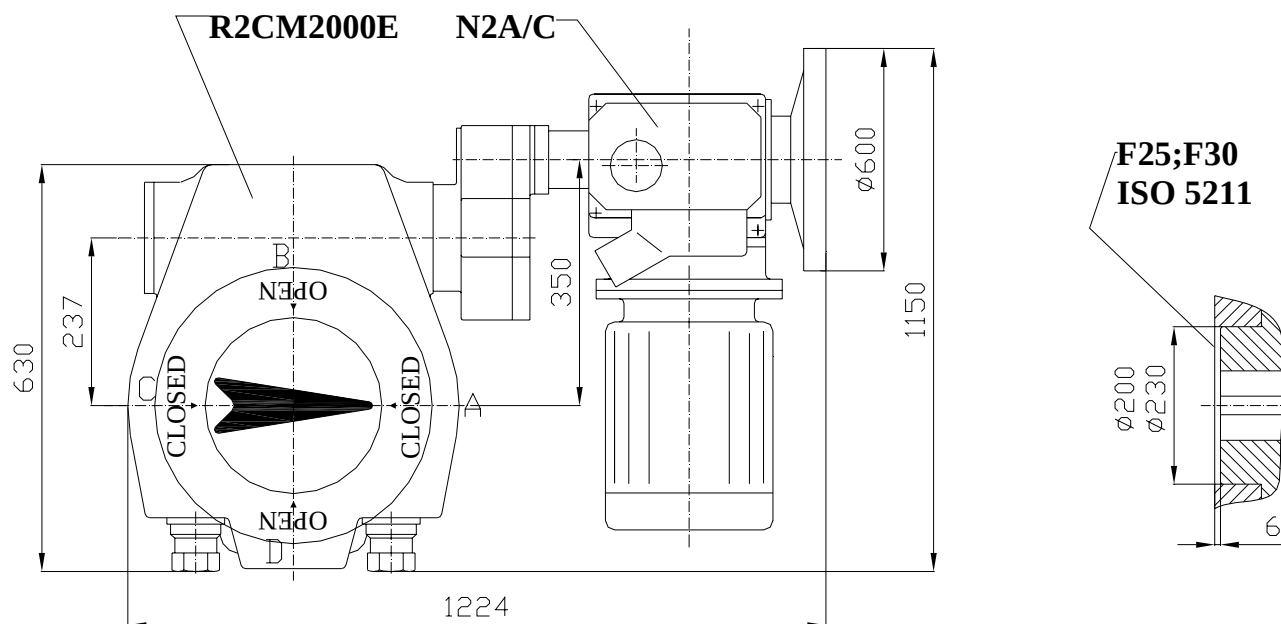
NR 10ST(N10ST)	-	10000	-	114	/	90	-	90	-	F25	/	1	/	80	-	A	-	3E
Tip si marime																		Var. echipare
Moment iesire [N.m]																		Poz. canal pana
Durata cursei [sec]																		Cod dimensiune
Cursa [°]																		Forma de antrenare
Gabarit motor																		Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA "SFERT DE TURA NR 11ST (N 11ST)



1. Dimensiuni

Nr	1438 b
Data	06.09.2006



2. Caracteristici tehnice

- Moment iesire.....16000 Nm
- Cursa.....90°
- Durata cursei.....152 sec
- Tip motor.....ASFM-pentru NR 11ST
ASI-pentru N 11ST
- Putere motor.....Pentru N 11ST...1,5 Kw
Pentru NR 11ST.....1,6 Kw
- Turatie motor.....1500 rot/min
- Flansa iesire ISO 5211.....F25
- Masa.....374 kg

3. Simbolizare :

NR 11ST(N11ST) - 16000 - 152 / 90 - 90 - F25 / 1 / 80 - A - 3E

Tip si marime

Moment iesire [N.m]

Durata cursei [sec]

Cursa [°]

Gabarit motor

Var. echipare

Poz. canal pana

Cod dimensiune

Forma de antrenare

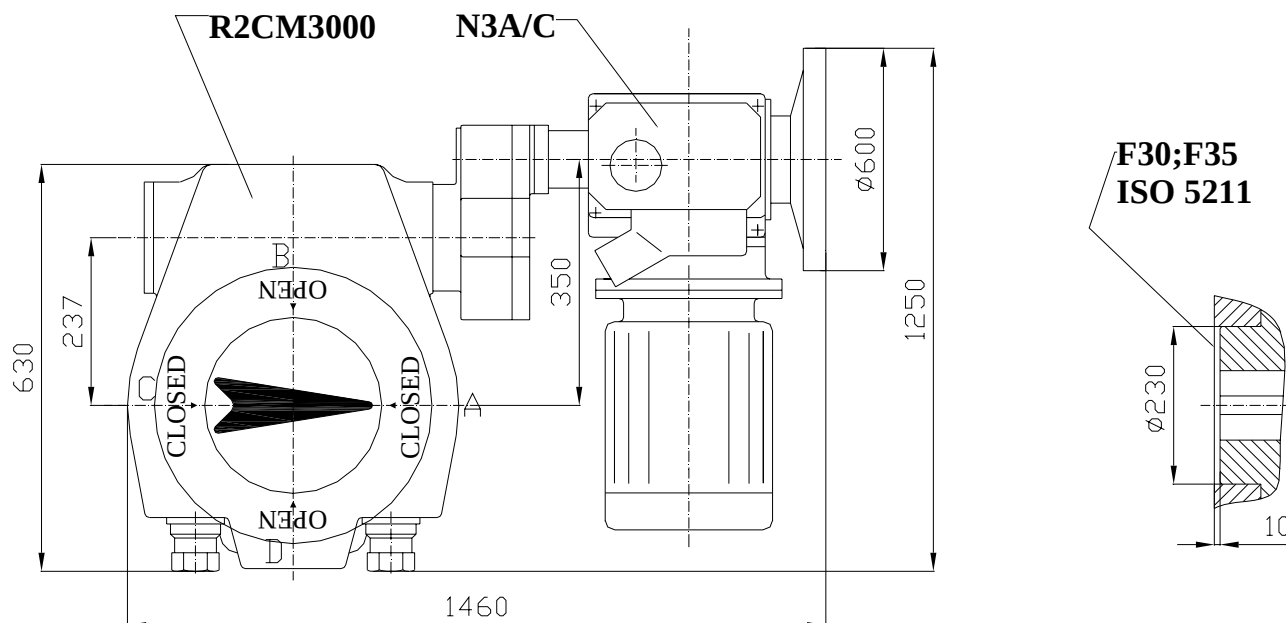
Flansa de prindere – ISO 5211

MECANISM DE ACTIONARE ELECTRICA "SFERT DE TURA NR 12ST (N 12ST)



1. Dimensiuni

Nr	99a
Data	08.09.2006



2. Caracteristici tehnice

- Moment iesire.....22300 Nm
- Cursa.....90°
- Durata cursei.....348 sec
- Tip motor.....ASFm-pentru NR 12ST
ASI-pentru N 12ST
- Putere motor.....4 Kw
- Turatie motor.....1500 rot/min
- Flansa iesire ISO 5211.....F25
- Masa.....435 kg

3. Simbolizare :

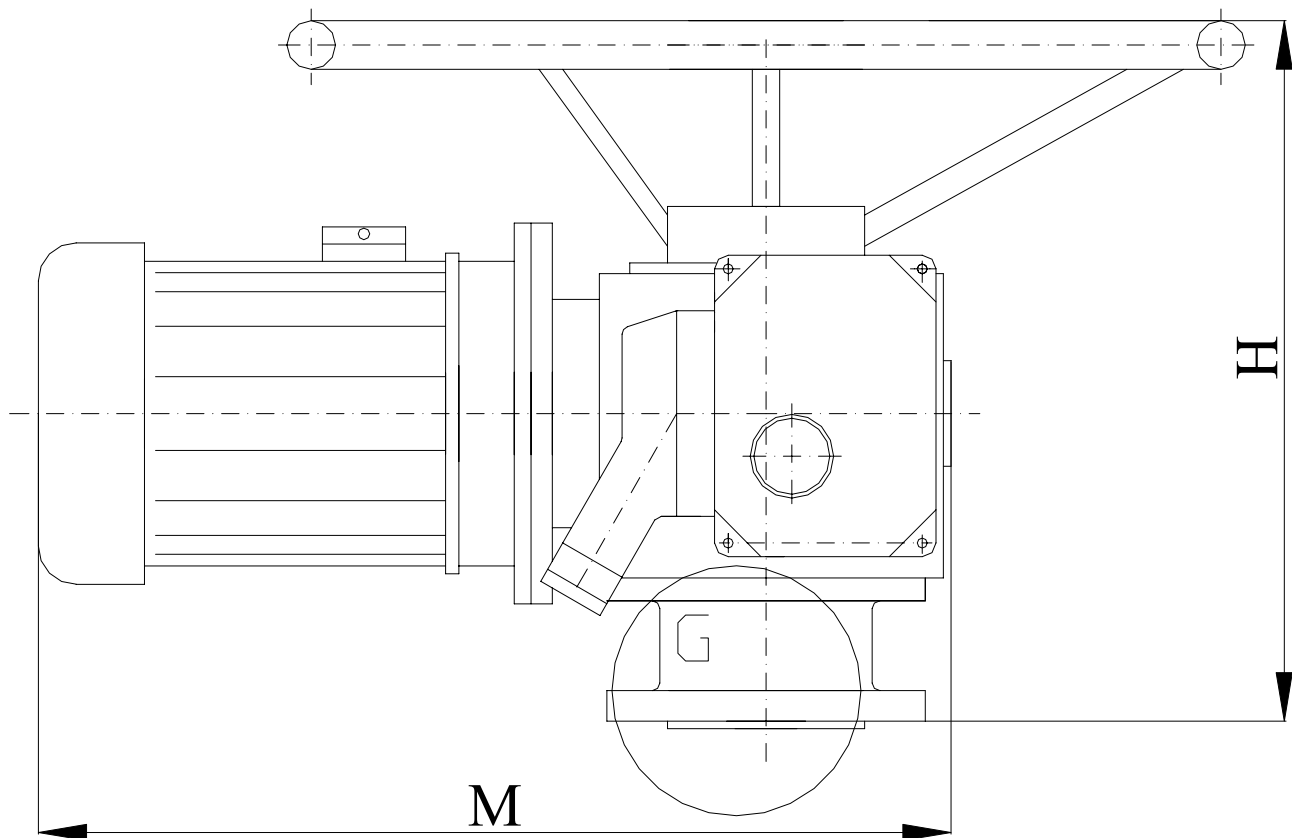
NR 12ST(N12ST) - 22300 - 348 / 90 - 112 - F30 / 1 / 80 - A - 3E

Tip si marime									Var. echipare
Moment iesire [N.m]									Poz. canal pana
Durata cursei [sec]									Cod dimensiune
Cursa [°]									Forma de antrenare
Gabarit motor									Flansa de prindere – ISO 5211

MECANISME ELECTRICE PENTRU ACTIONAREA ROBINETILOR MULTI-TURA

ELECTRIC ACTUATORS FOR MULTI-TURN VALVES

TIP/TYPE **NOTOR A/C**



Mecanismele tip **NOTOR A/C** se folosesc pentru actionarea electrica a robinetilor industriali multi-tura de inchidere-deschidere, precum si pentru alte aplicatii “multi-tura”.

1. Conditii de utilizare a mecanismelor

- tensiuni de alimentare:

- standard: 380 V.
- la cerere: 220 V; 400 V; 500 V.

-frecventa retelei:

- standard: 50 Hz.
- la cerere: 60 Hz.
- numar maxim de porniri pe ora: **6**
- temperatura mediului ambiant:
- pentru mecanism:
 - standard: -20°C.....+45°C.
 - la cerere: -40°C.....+40°C.
- pentru cofretul electric:
 - standard: -5°C.....+40°C.
 - la cerere: -29°C.....+40°C.
- executie speciala pentru climat tropical umed **TH**, conform STAS 6692-83.
- puterea maxima a motorului electric: **4kW**.
- turatia motorului electric: **1500 rot/min**.
- gradul de protectie mecanica: **IP 54**.
- variante de executie:
- normala: **N**

2. Caracteristici constructive

Mecanismele tip **NOTOR** (vezi fig,1-4, tab.1 si 2), includ urmatoarele subansamble de baza:

- **mecanism** propriu-zis – poz.1
- **motor** – poz.2
- **ansamblu comanda cu microintreruptori** – poz.3

2.1 Mecanismul propriu-zis

Gama de mecanisme in executie normala cuprinde 3 marimi de baza:

- NOTOR 1A/C, NOTOR 2A/C, NOTOR 3A/C.

Pentru momente de iesire peste 50 daN.m, mecanismul **NOTOR 3A/C** poate fi echipat cu reductoare cilindrice intermediare, care asigura actionarea cu momente de pana la 1000 daN.m.

NOTOR A/C electric actuators are designed to drive “multi-turn” ON-OFF industrial valves or any other “multi-turn” applications.

1. General operating conditions

- supply voltages:
 - standard: 380 V.
 - by request: 220 V; 400 V; 500 V.
- frequency:
 - standard: 50 Hz.
 - by request: 60 Hz.
- maximum number of starts/hour: **6**
- temperature of the ambient:
 - for the actuator:
 - standard: -20°C.....+45°C.
 - by request: -40°C.....+40°C.
 - for the power switch box:
 - standard: -5°C.....+40°C.
 - by request: -29°C.....+40°C.
- special **TH** manufacturing available, as per STAS 6692-83.
- maximum power of the electric motor: **4kW**.
- electric motor speed: **1500 rot/min**.
- mechanical enclosure degree: **IP 54**.
- manufacturing variants available:
 - for normal environment: **N**

2. Constructive features

NOTOR type actuators (see fig,1-4, tab.1 and 2), include the following basic units:

- **actuator** gearbox – pos.1
- **motor** – pos.2
- **control switch box** – pos.3

2.1. Actuator gearbox

The range of actuators for normal environment has 3 basic sizes:

- NOTOR 1A/C, NOTOR 2A/C, NOTOR 3A/C.

For output torques higher than 50 daN.m, the actuator **NOTOR 3A/C** can be equipped with intermediate spur gearboxes. The combined units resulting can deliver output torques ranging from 160 daN.m up to 1000 daN.m.

2.1.1. Angrenaje

2.1.1.1. Angrenajele cilindrice, melcii si arborii se executa din otel de imbunatatire.

2.1.1.2. Rotile melcate se executa din bronz cu staniu CuSn12.

2.1.2. Carcase

2.1.2.1. Carcasele mecanismelor se executa din:

- aluminiu - **NOTOR 1A/C**,
- fonta – celelalte mecanisme si reductoarele intermediare.

2.1.3. Lagare

Atat arborele de intrare cat si arborele de iesire sunt lagaruiti pe rulmenti radiali cu bile.

La reductoarele intermediare se folosesc bucese lagar din bronz si fonta.

2.2 Motor

2.2.1. Pentru actionarea mecanismelor in executie normala se folosesc motoare electrice standard tip **ASI** trifazate de uz general, cu rotor in scurt-circuit, cu functionarea garantata pentru max. 6 porniri / ora, vezi tab.2.

2.2.2. La cerere, se pot folosi si alte tipuri de motoare, cum ar fi:

- motoare speciale tip **TAR**, cu puteri pana la **0,75 kW** inclusiv, cu functionare garantata pentru maximum 1200 porniri / ora.
- motoare cu frana, tip **ASF** sau **ASM**, cu functionare garantata pentru maximum 120 porniri / ora.
- motoare monofazate cu moment marit, tip **CM**.

2.3. Bloc comanda cu microintreruptori

Pentru realizarea functiunilor de limitare la capete de cursa, de limitare a momentului reglat, si indicarea pozitiei, mecanismele sunt echipate cu un bloc de comanda cu microintreruptori (ACM), care se executa in urmatoarele variante:

2.3.1. Executie normala:

Varianta **1E**:

- mecanism tip contor pentru reglarea oricarei curse in intervalul:
1-75 sau **1-750** rot / cursa – variante standard;
4 – 2750 rot / cursa – la cerere.
- mecanism de limitare a momentului
- rezistenta de incalzire anti-condens.

Varianta **2E**:

- componentele de la **1E**, plus mecanism de indicare locala a pozitiei, cu vizor.

2.1.1. Gears

2.1.1.1. The cylindrical gears, the worms and the shafts are made of heat treated steel.

2.1.1.2. The worm wheels are made of cast tin bronze CuSn12.

2.1.2. Housings

2.1.2.1. The housings are made of:

- alluminum - **NOTOR 1A/C**,
- cast iron – all the other actuators and the intermediate gear units.

2.1.3. Bearings

Both the input shaft and the output shaft are supported on radial ball bearings.

Bronze and cast iron bearing sleeves are used at the intermediate gearboxes.

2.2 Motor

2.2.1. Standard general use 3-phase squirrel cage motors type **ASI** are used to drive the actuators, guaranteed for maximum 6 starts / hour, see table 2.

2.2.2. By request, other types of motors can be used, such as:

- special **TAR** motors, with powers up to **0,75 kW** inclusively, guaranteed for maximum 1,200 starts / hour.
- brake motors type **ASF** or **ASM**, guaranteed for maximum 120 starts / hour.
- single phase **CM** motors with increased torque.

2.3. Control switch box

To perform the functions of stroke end limiting, set torque limiting and continuous position indication, the actuators are equipped with a control switch box (CSB), which can be produced in any of the following variants:

2.3.1. For normal environment:

Varianta **1E**:

- counter mechanism for stroke setting within the range:
1-75 or **1-750** turns / stroke – as standard;
4 – 2750 turns / stroke – by request.
- torque limiting device
- heating resistance.

Varianta **2E**:

- all the components from **1E**, plus local position indication.

Varianta 3E:

- componentele de la 2E, plus mecanism de indicare electrica continua a pozitiei, care poate fi:
- rezistiv (P) - cu potentiometru de 100 Ω .
- electronic (T) - cu traductor de semnal unificat 4-20 mA.
- inductiv (SIP) - cu senzor inductiv cu semnal unificat 4-20mA.

2.4. Actionare manuala

Mecanismele sunt prevazute cu actionare manuala si sistem de cuplare a actionarii manuale. Acelasi sistem asigura decuplarea mecanica automata a actionarii manuale la reluarea alimentarii motorului electric.

2.5. Conexiuni electrice

2.5.1. Conectarea electrica a microintreruptoarelor si a rezistentei de uscare, precum si a potentiometrului / traductorului / senzorului cu instalatia de comanda se face cu priza si fisa cu contacte multiple tip CRD (Conect Bucuresti), cu prindere pe pini cu borne cu surub, ca varianta standard.

2.6. Ungere

2.6.1. Mecanismele se ung cu unsoare consistenta tip U 185 Li 2 EP.

2.6.2. Reductoarele intermediare se ung cu unsoare consistenta UM 185 LiCaPb 2.

2.7. Instalatia electrica

2.7.1. Schema electrica a ansamblului de comanda cu microintreruptori se afla pe eticheta lipita in interiorul capacului. Conexiunile electrice intre componentele din interiorul ansamblului de comanda si priza se vor face conform acestei scheme electrice.

2.7.2. La cerere, mecanismele se pot livra cu cofret electric de forta si comanda. Schema de conexiuni electrice a cofretului este fixata pe capacul interior.

Variant 3E:

- all the components from 2E, plus continuous position indication, which may respectively be:
- resistive (P) - with potentiometer of 100 Ω .
- electronic(T) - unified signal transducer, 4-20 mA.
- inductive(SIP) -inductive sensor with unified signal of 4-20mA.

2.4. Manual drive

The actuators are provided with a handwheel and manual drive and a device for coupling the manual drive. The same system ensures the automatic mechanical disengagement of the manual drive, whenever the motor is energized.

2.5. Electrical connections

2.5.1. The electrical connections of the micro-switches, the heating resistance and the potentiometer / transducer / sensor to the control installation are done by means of socket and multiple contact plugs type CRD (Conect Bucharest), using plugged pins with threaded terminals as standard.

2.6. Lubrication

2.6.1. The actuators are lubricated with grease type U 185 Li 2 EP.

2.6.2. The intermediate gearboxes are lubricated with grease UM 185 LiCaPb 2.

2.7. Wiring

2.7.1. The wiring diagram with the contact development is shown on the label glued inside the cover of the switch compartment. According to this contact development, the user can easily make the connections from the components to the electric plug.

2.7.2. By request, the actuators can be delivered with power control box. The wiring diagram with the contact development is glued inside the cover.

2.8. Alegerea mecanismului

Pornind de la momentul necesar pentru actionarea robinetului, clientul va alege marimea mecanismului din tabelul 1.

Pornind de la timpul de actionare dorit t_a , se calculeaza apoi turatia de iesire n , cu relatia:

$$n = c / p \times t_a, \text{ unde:}$$

- n = turatia de iesire calculata [rot/min],
- c = cursa elementului activ al robinetului [mm],
- p = pasul elementului activ al robinetului [mm]
(c / p = numarul de rotatii pentru o cursa completa)
- t_a = timpul de actionare necesar [min].

Din tabelul 1 se va alege apoi turatia de iesire cea mai apropiata de turatia de iesire calculata.

2.8. Choosing the actuator

Starting from the torque required to close the valve, the client will select the proper actuator from the table 1.

Considering the operation time required t_a , the output speed n can be calculated so:

$$n = c / p \times t_a, \text{ where:}$$

- n = calculated output speed [rot/min],
- c = stroke of the valve active element [mm],
- p = pitch of the valve active element [mm]
(c / p = number of turns for a complete stroke)
- t_a = operating time wanted [min].

The user would eventually choose the output speed nearest to the calculated output speed.

SIMBOLIZARE MECANISM / ACTUATOR ORDERING CODE

N3A/C	-	50	/	45	-	100	-	3E-P	-	216/6
Marime / Size										Cursa / pas - stroke/pitch
Mom. nominal / Nom.torque[daN.m]										Varianta echipare / Switchbox variant
Turatie de iesire/Output speed [rot / min]										Gabarit motor / motor frame

SIMBOLIZARE MOTOR / MOTOR ORDERING CODE

ASI	-	112	-	4	x	1500	-	B5	-	N	-	IP54	-	380	-	50	-	B
Tip / type																		Cl.izolatie / ins.
Gabarit / frame																		Frecventa/frequency [Hz]
Putere / power [kW]																		Tensiune / voltage [V]
Turatie / speed [rot/min]																		Grad de protectie mecanica / capsulation
Forma constructiva / Flange																		Grad de protectie climatica / Climatic protection

SIMBOLIZARE ACM / SWITCHBOX ORDERING CODE

ACM - 3	-	3E-P	-	53	-	1	-	N
ACM pentru NOTOR 3A/C CSB for NOTOR 3A/C								
Varianta de echipare / Switchbox variant								Varianta de executie / Climatic prot.
Cursa / pas – stroke / pitch								Raport angrenaj elicoidal / helicoidal gear ratio

MECANISME DE INCHIDERE-DESIDERE / "ON-OFF" ELECTRIC ACTUATORS

NOTOR A/C

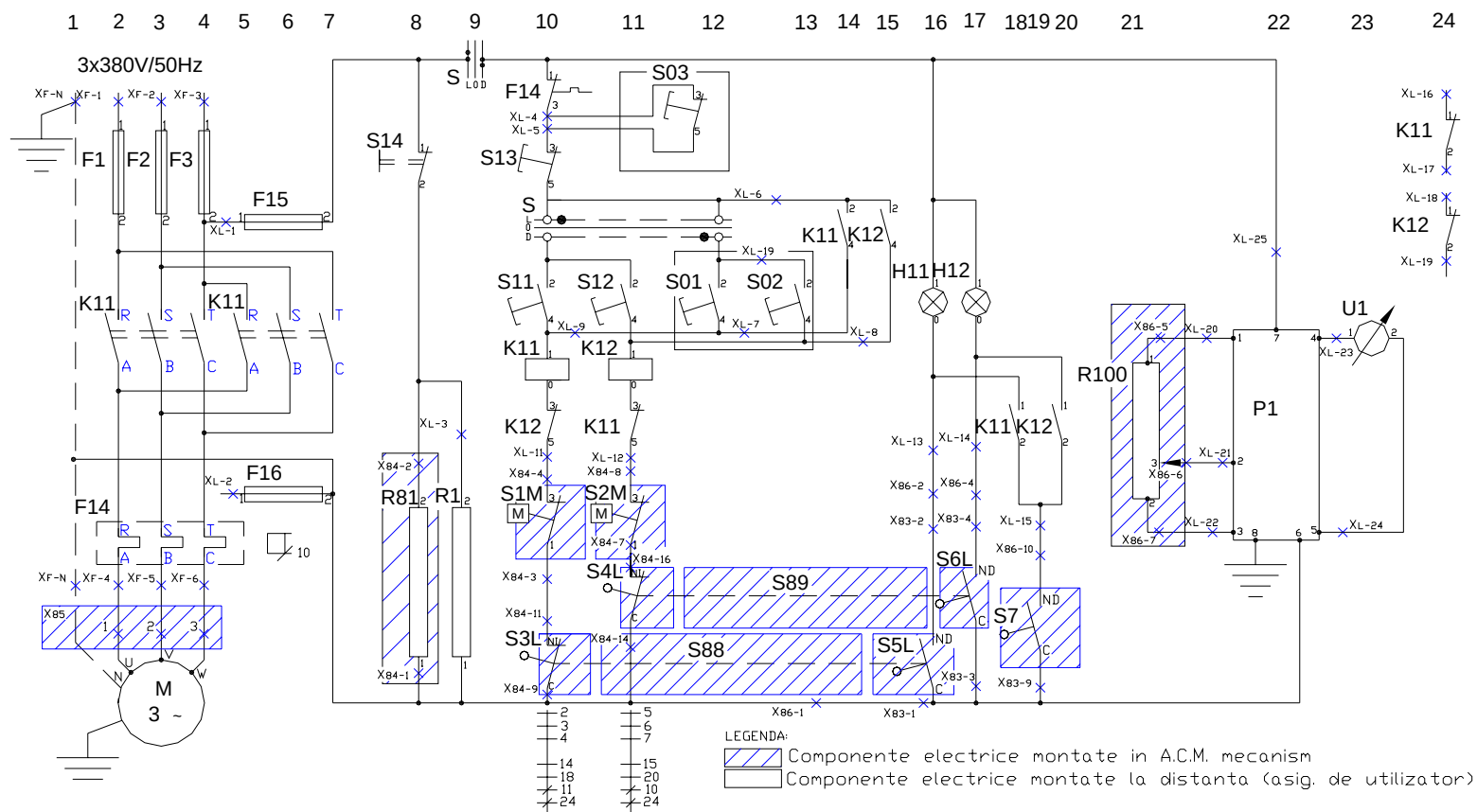
CARACTERISTICI TEHNICE / TECHNICAL CHARACTERISTICS

TIP MECANISM	MOMENT NOMINAL [daN.m]		MOMENT DE PORNIRE [daN.m]	TURATIE DE IESIRE (rot/min)	MOTOR ELECTRIC ASI 220/380V - 50Hz - IP54			MASA CU MOTOR ASI [kg]
	minim	maxim			PUTERE [kW]	TURATIE [rot/min]	GABARIT	
ACTUATOR TYPE	NOMINAL TORQUE [daN.m]		START TORQUE [daN.m]	OUTPUT SPEED (rot/min)	ELECTRIC MOTOR ASI 220/380V - 50Hz - IP54			WEIGHT [kg]
	minim	maxim			POWER [kW]	SPEED [rot/min]	SIZE	
N1A/C	1	3	4	28	0,18	1500	63-71	18
				45	0,25		71	18,5
				71	0,37		71	21
	3	8	10	25	0,37		71	21
N2A/C	5	12	15	36	0,75	1500	80	47,6
				45	1,1		90S	51,1
				71	1,5		90L	54,9
	8	20	25	19	0,75		80	47,6
				24	1,1		90S	51,1
				37	1,5		90L	54,9
N3A/C	20	50	60	31	3	1500	100L	97
				45	4		112M	103
				71	4		112M	103
				90	4		112M	103
N3A/C - R100	30	80	100	16	3	1500	100L	191,5
				25	4		112M	197,5
				40	4		112M	197,5
N3A/C - R160	50	125	160	10	3	1500	100L	198,5
				16	4		112M	204,5
				25	4		112M	204,5
N3A/C - R250	80	200	250	6,3	3	1500	100L	294
				10	4		112M	300
				16	4		112M	300
N3A/C - R400	140	320	400	4	3	1500	100L	308
				6,3	4		112M	314
				10	4		112M	314
N3A/C - R630	220	500	630	2,5	3	1500	100L	435
				4	4		112M	441
				6,3	4		112M	441
				8	4		112M	441
N3A/C - R1000	360	800	1000	1,6	3	1500	100L	449
				2,5	4		112M	455
				4	4		112M	455
				5	4		112M	455

NOTOR A/C

OVERALL AND CLAMPING DIMENSIONS

7



Antrenare motor		Intr. rezist. de uscare		Comanda locala		Comanda la distanta		Contacte automentinere		Semnalizare			Indicarea pozitiei			Contacte auxiliare	
Deschidere	Inchidere	Mecanism	Cofret	Deschidere	Inchidere	Deschid	Inchid.	Deschid	Inchid.	Deschid.	Inchid.	Blinker	Rezistiv	Convertor	Aparat indicator		
VARIANTA DE ECHIPARE	EXECUTIE NORMALA	ANTEX															
																	
																	
																	
																	

SIMBOLIZARE

CFC - nE - P - M - N - L

Cofret forta si comanda

Varianta de echipare(0E;1E;2E;3E)

Indicarea pozitiei(potentiometru,traductor)

Microinterrupatoare capsulate

Executie (N;Ns;Ex)

Marime mecanism(N1A/C;N2A/C;N3A/C)