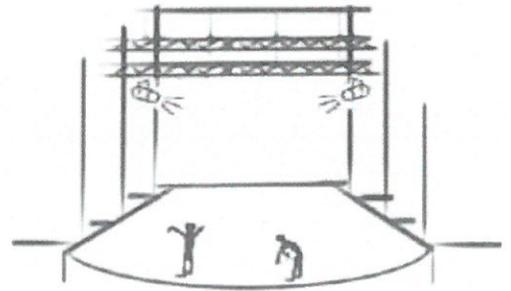


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& Realisatie



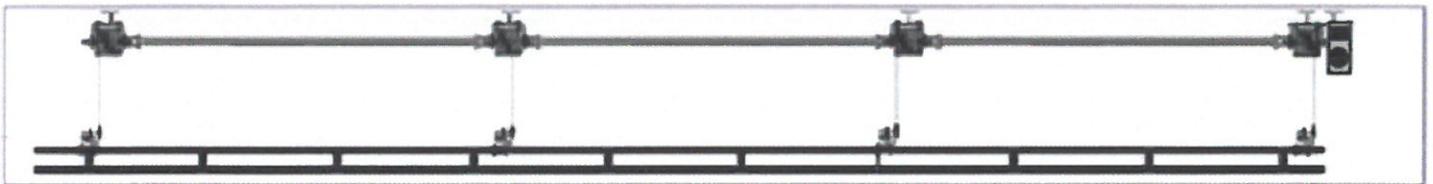
DATA SHEET

drum flybar 300 kg version

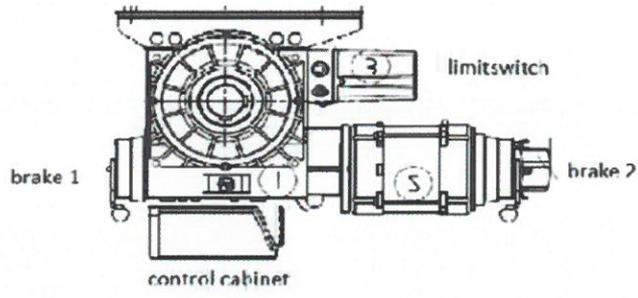
fixed speed

EN 17206

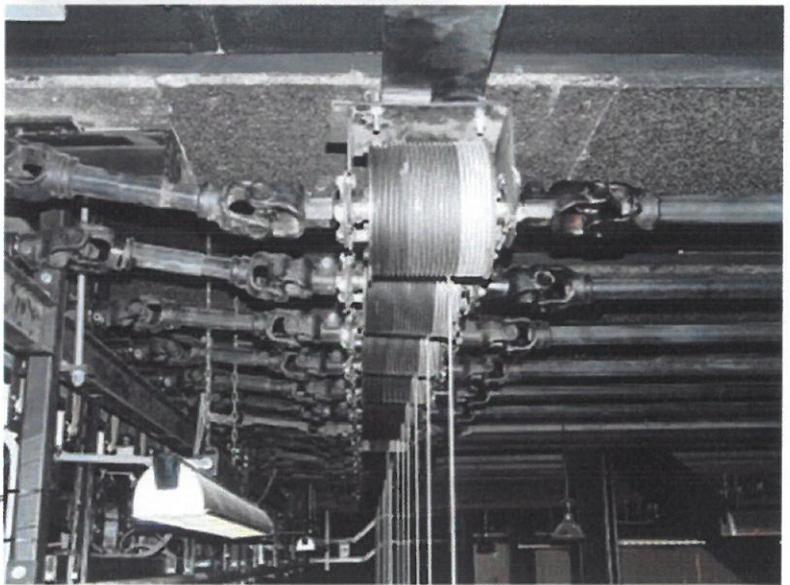
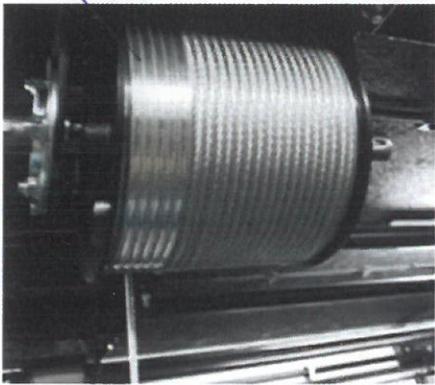
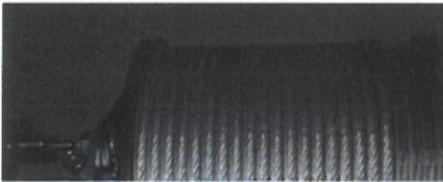
p. 1.6.



Flybar model	300-4D-0,3-Cont	
p. 1.3.	Power motor	1,5 kW 400 V
p. 1.1.	Lifting capacity	300 kg
	Load protection	current measurement
	Gearbox model	GFA SI 60-24-55
p. 1.15	Brake	Double, silent version
	Braking torque	1x8 1x12 Nm.
p. 1.14	Special functions	Limit end/emergency switches
	Sound level	1 m < 60 Dba
p. 1.2.	Lifting speed	0,3 m/sec fixed speed
	Duty cycle	20 min.
p. 2.	Flybar type	Double pipe 48,3 x 2,9 mm 20 cm high, length 12 m
	Suspension	4 x points
p. 1.6.	Drum type	Plastic composition PA6
p. 1.7	Diameter drum	200 mm p. 1.8
p. 1.10	Steel cable	5 mm / 7x19 / 2160 N/mm ²
	Cardan shaft	gaff cardan shaft 800 Nm
	Lifting height	17 m



P.1.9.



p.1.9.

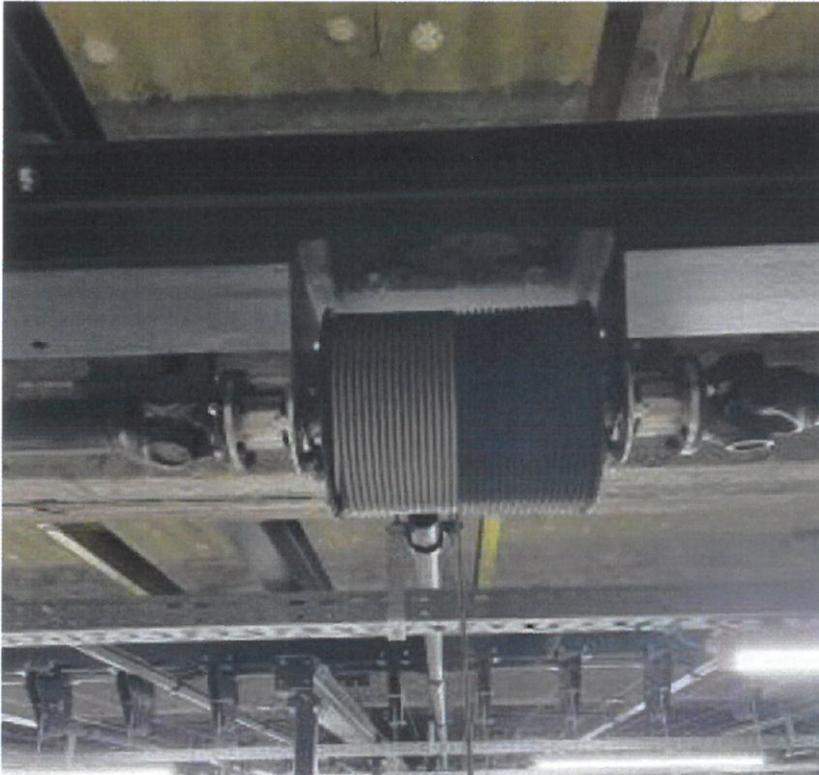
Drum.

p.1.7. The drums made of Composition plastic PA6, this due to the own weight on the roof construction.

The whole is supported with long-life lubricated ball bearings.

p.1.8.

The drums consist of grooved drums with a diameter 200 mm on the left and right and with the steel wire fully inserted in the drum (outside on the same side with outside on the drum). This prevents the steel wire from jumping into another groove.



Steel wire.

p.1.9. A plastic protective device is mounted on the holder. This prevents the steel cable from running out.

The fixation of the steel wire is fixedly secured by means of a harp closure and secured.

p.1.13

In view of the operating time of the system, the drums are fitted with a right-hand steel wire.

p.1.10. The steel wires have a galvanized quality of 7x19 with a safety factor of 10 times, with a load of 170 kg. Min breaking load 17.7 kN.

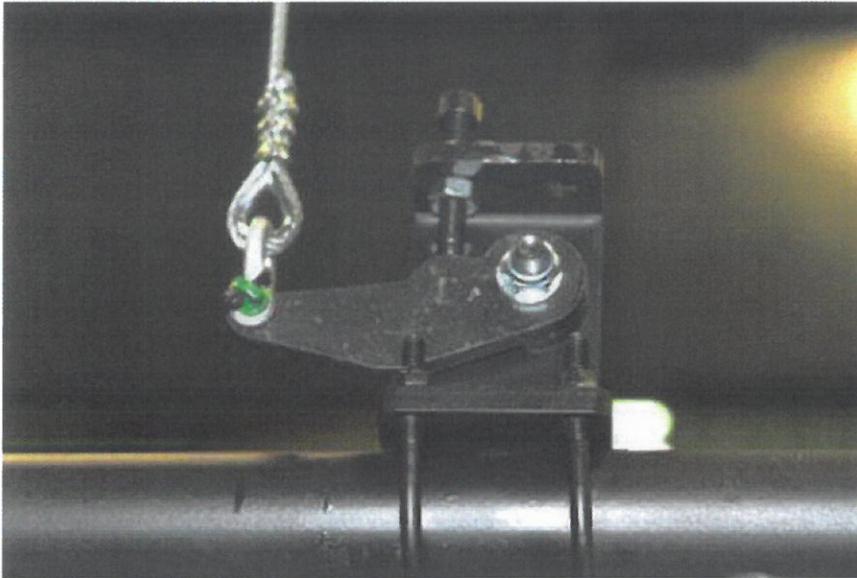
Cable eyes provided with sufficient size.

p.1.11.

p.1.13

p.1.12

Suspension point



Drives.

GFA engines.

p.1.3 Power 1,5 kW.

Type SI60-24

p.1.1 Required torque is 300 kg own weight rod + load.

Drum diameter in heart steel wire is 195 mm.

The entire system is centrally driven by an electric motor fitted with a spindle limit switch which is equipped with emergency end above / below and end above / below.

p.1.14 The spindle limit switch is an integrated drive.

The drive consists of a worm-wheel shape-retaining drive equipped with a brake motor with a double brake and handbrake lever.

TECHNISCHE DATEN SI 60.24

2. Technical data "Rapid Safedrive®"

Drive torque 400Nm - 1.000Nm

ELEKTROMATEN		SI 60.24
Series		5G115F
Output torque	Nm	600
Output speed	rpm	24
Hollow-shaft Ø	mm	55
Locking torque ¹	Nm	2040
Safety brake (approval number)		TorFV 4 / 026
Permitted OPEN / CLOSE output speed in frequency-inverter operating mode ²	rpm	42 / 42
Motor power	kW	1,50
Supply voltage, frequency	V - Hz	3x230/400-50
Nominal current ²	A	6,8 / 3,9
Motor duty cycle	ED	53-60%
Max. cycles per hour ⁶		30
Supply side wiring / fusing (delayed action)		5x1,5 ² / 10A
Limit switch range ⁹		20 (60, 110)
Max. hand force NHK / KNH ⁸	N	190 / 155
ELEKTROMATEN weight	kg	44
Spare parts: Catalogue page		8.58
Part no. installation drawing (dxf, dwg)		50000830
Part no. ELEKTROMATEN		10002623

Footnotes under 3.

p.1.15. Brake (double, silent version)

The brake is double and equipped with a rubber seal to prevent moisture and greasy air (of smoke machines). These brakes are also in a silent version. The brakes are with handles for brake testing.

p.2. Flybar.

The flybar consists of a two steel tubes with a diameter of 48,3 mm with a wall thickness of 2,9 mm.

The tube is connected by means of a coupling tube 10 cm long and then welded around. The flybar is hung on adjustable arm suspension.

The flybar length 12 m. p.2.

p.1.6. 4 point suspension. The suspension is equipped with an adjustable arm and a low installation.

The steel wire is attached by means of a harp closure and hydraulically pressed end connection.

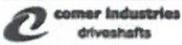
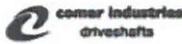
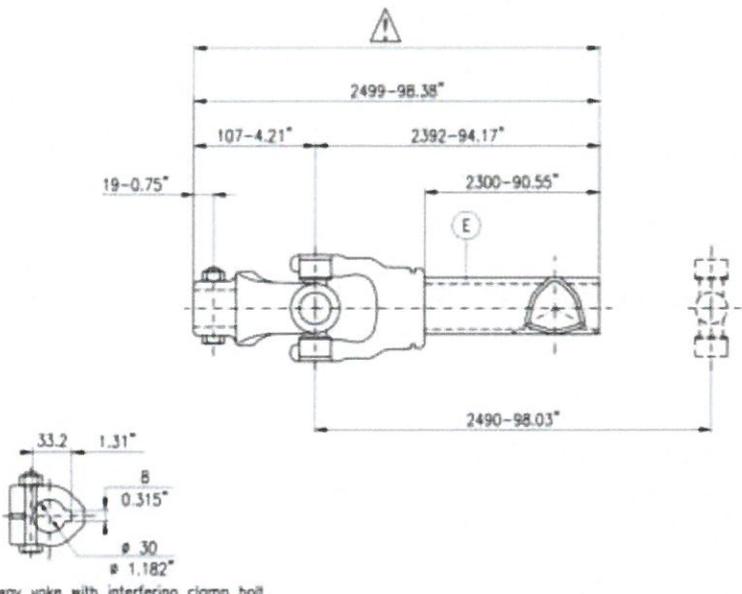
Flybar painted in matte black color.

Load below the suspension point 150 kg. p.1.4.

Load between the suspension points 150 kg. p.1.5.

Load at the end of the rod 30 kg.

Cardan shafts.

	End fittings	Max. torque	Notes:									
	Tractor Cod: -	-			Implement Cod: -	540						
Features												
Series:	T											
Type:	40											
Code:	125.340.006.11 (F.3667)											
Description:	T4024905333											
Customer's code:	-											
Colour:	MATT-BLACK RAL 9004											
Last drawing												
Index:	-											
Date:	-											
Application												
-												
Driveline data												
X	-											
Y	-											
E	2345-92.32"											
I	-											
P	-											
Overlap												
Steel tubes	Guard											
Max.	-											
Min.	400											
Greasing point												
1)	-											
2)	-											
The dimensioning is cross to cross												
												
keyway yoke with interfering clamp bolt												
Cross and tubes		Data		r.p.m.	Data		r.p.m.	100 min.⁻¹	Data for only critical velocity		Customer:	
27  74.6		 43.5x3.4  36x4.5		KW CV Nm. br.Nm. 540 4050		KW CV Nm. in.lb. - - -		 r.p.m. max.	540 r.p.m. 1000 r.p.m. Max. - Max. - L max. - L max. -			
Continuous operation data and conditions, working angle 5°, average life 1000 hours										Checked:	Signed by: JP.z.	Date: 12-09-20

Control system CS-12

P.3.1

P.3.2

A central custom made panel for 12 flybars is placed with which the pulls are controlled. We control system consist the wired remote control and e-stop system with check by special control module the functioning of all safety devices. The control panel consist:

12 switches for flybars

12 indicators "on"

P.3.1

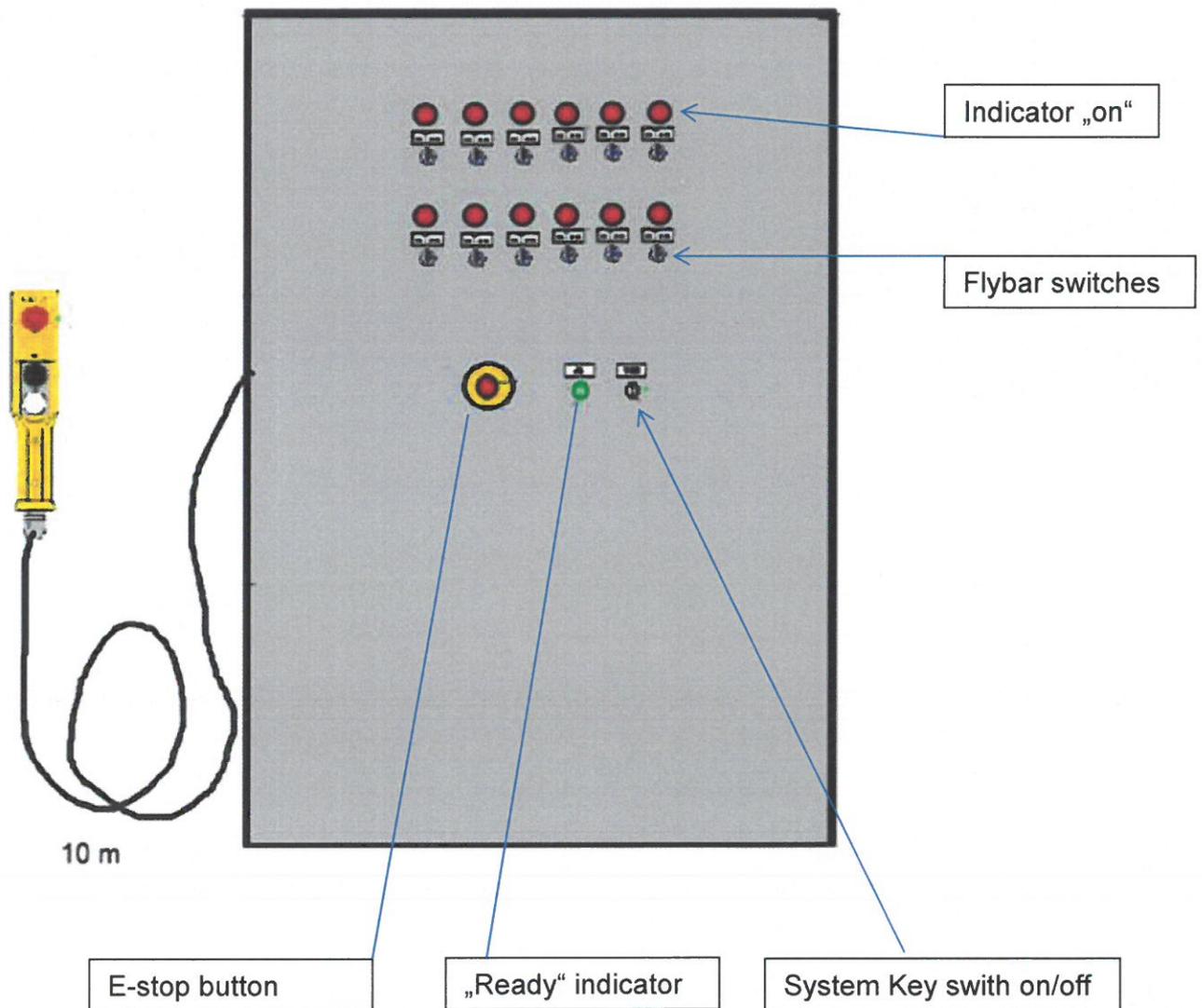
System key on/off

Green lamp for system ready indication. In case of "E-stop" activated the lamp goes off.

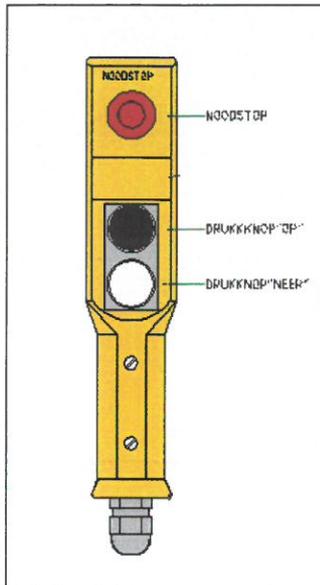
E-stop button

P.3.2

Remote controller with 10 m cable and buttons "Go" and "E-stop".



REMOTE CONTROL



EMERGENCY STOP

The emergency stop button de-energizes the control to safe state.

PUSH BUTTON UP

The UP button is for lifting the pulls.

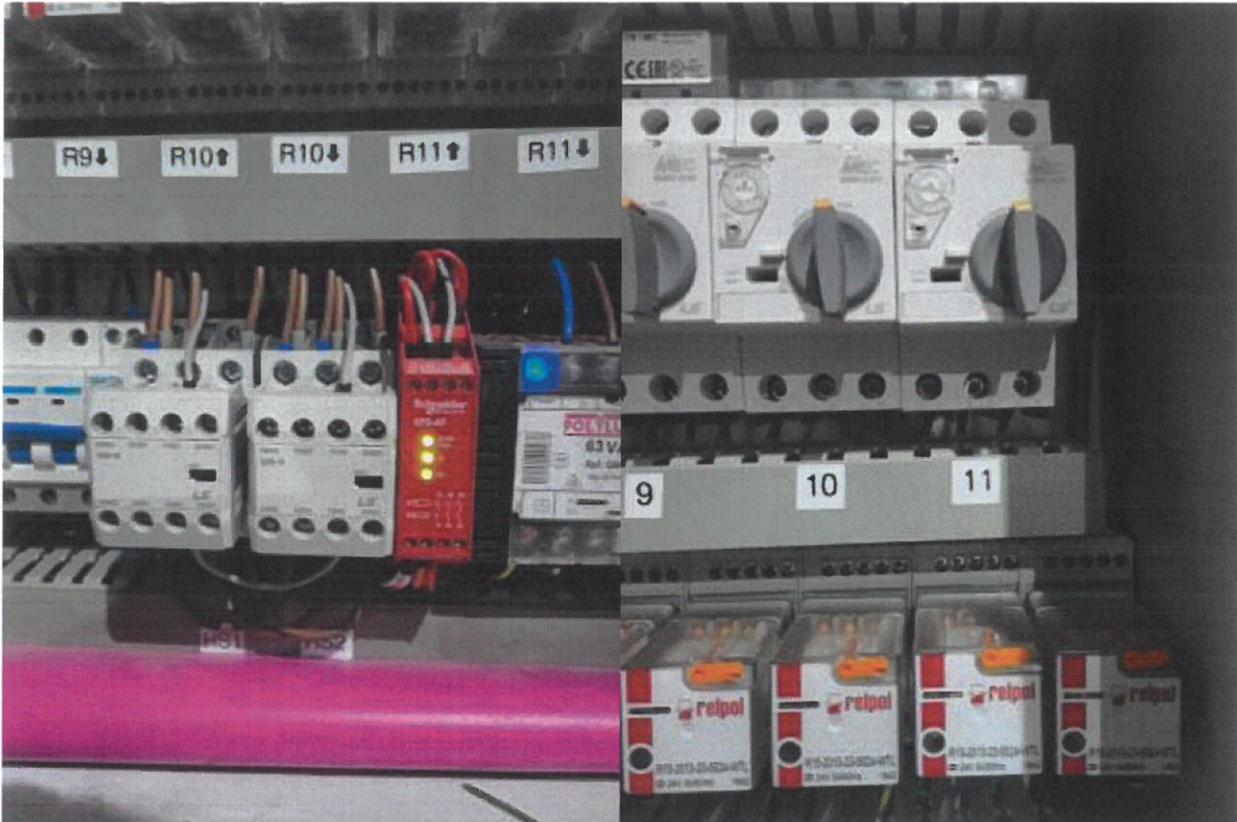
PUSH BUTTON DOWN

The DOWN button is for lowering the pulls.

Emergency stop system

p. 3.2

The control system is equipped with an emergency stop module according to SIL2 requirements. The special control module check the functioning of all safety devices and is with indication as long as the activation is in effect.



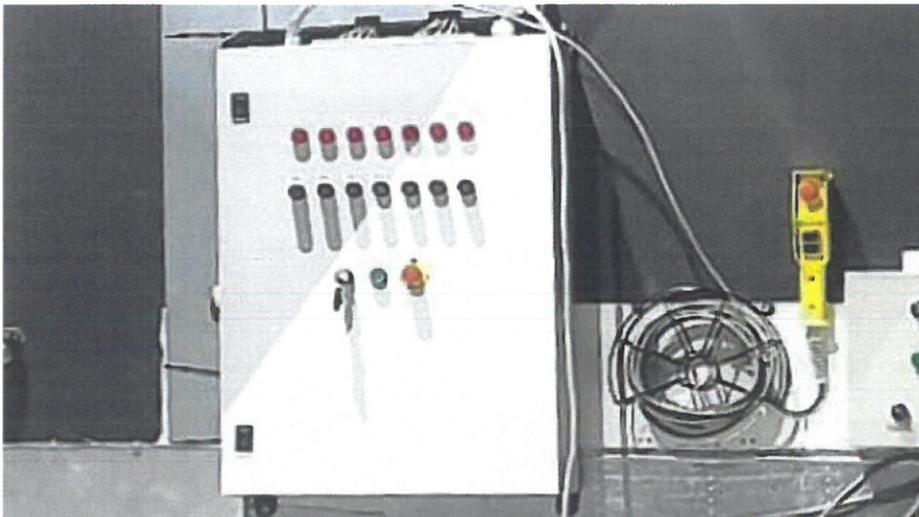
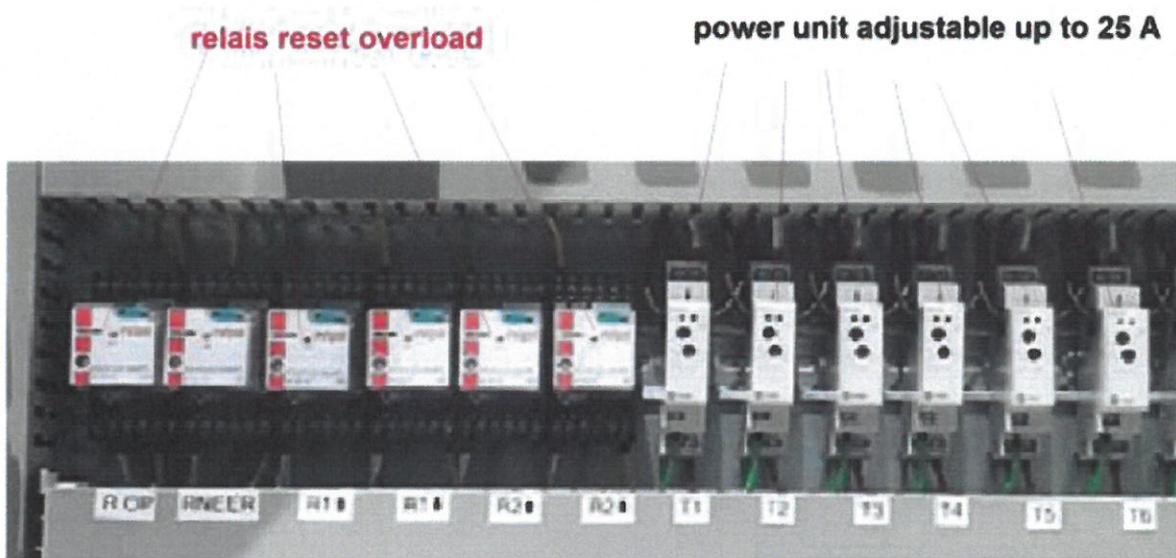
The power supply and control cables must be supplied and mounted by third parties.
Power supply 400 V RST+N+A.
Motor power supply cables 5 x 1.5 mm².

Overload protection

p.3.2

According to the standard EN 17206, a pull must be equipped with overload potential. In this installation the solution is to secure with current mitigation in the up direction, when too heavy a weight is lifted, the motor absorbs more current, causing the installation to stop. One can no longer move in the erection, only lowering. In case of nuisance a red lamp lights up. It goes out when the downward movement is activated, by means of the reset relay.

This protection has a deviation of 10 to 20 % of the maximum load.
this is measured with an upward movement

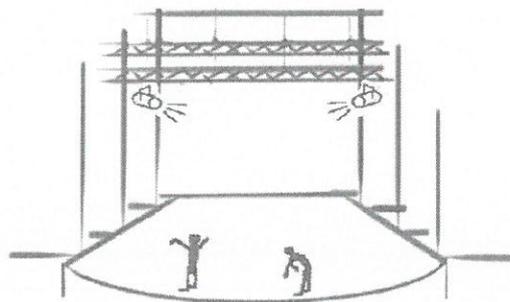


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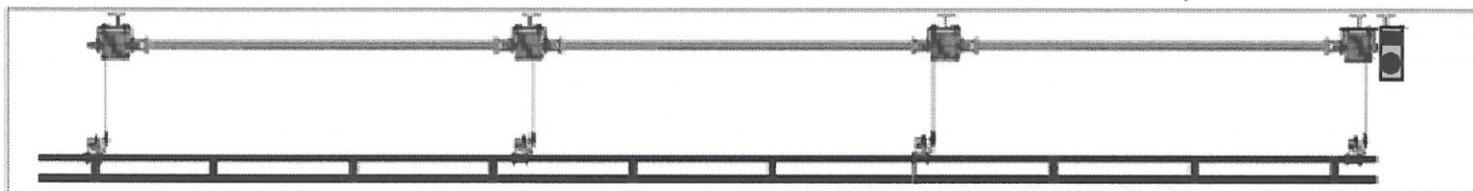
& Reali s at ie



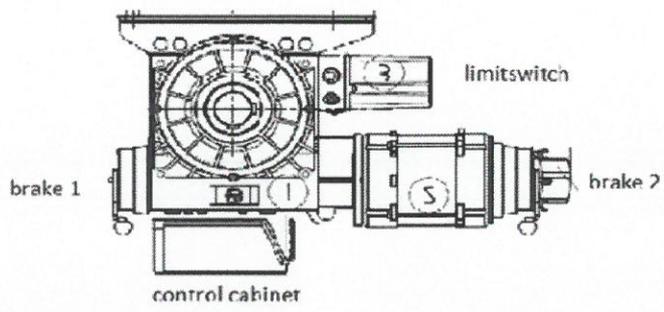
Vertimas iš anglų kalbos

DUOMENŲ LAPAS būgninis keltuvas 300 kg versija fiksotas greitis EN 17206

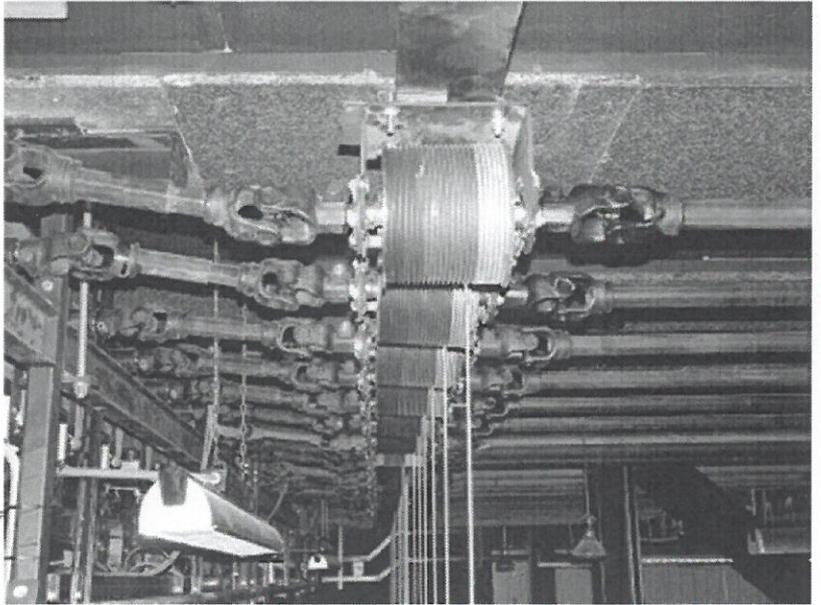
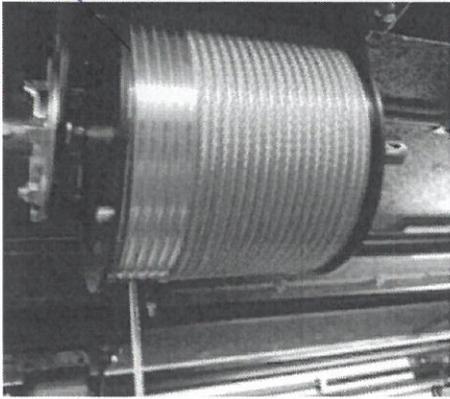
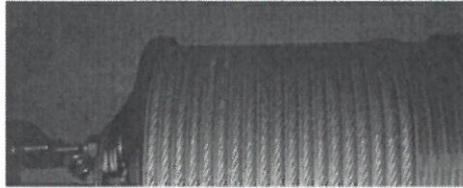
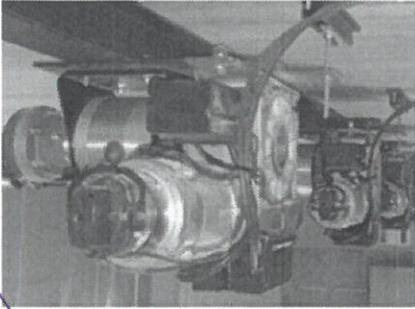
p.1.6.



Keltuvo modelis	300-4D-0,3-Cont
p.1.3. Variklio galia	1,5 kW 400 V
p.1.1. Kėlimo galia	300 kg
Apsauga nuo perkrovos	srovės matavimas
Reduktoriaus modelis	GFA SI 60-24-55
p.1.15. Stabdis	Dvigubas, tylus variantas
Stabdymo momentas	1x8 1x12 Nm.
p.1.14. Specialios funkcijos	Ribiniai pabaigos / avariniai jungikliai
Garso lygis	1 m < 60 Db
p.1.2. Kėlimo greitis	0,3 m/s fiksuotas greitis
Nepertraukiamo darbo ciklas	20 min.
p.2. Štangos tipas	Dvigubas vamzdis 48,3 x 2,9 mm 20 cm aukščio, ilgis 12 m
p.1.6. Pakabinimo būdas	4 x /pakabinimo/ taškai
p.1.7. Būgno tipas	Kompozicinis PA6 tipo plastikas
Būgno skersmuo	200 mm ← p.1.8.
p.1.10. Plieninis lynas	5 mm / 19x7 / 2160 N/mm ²
Kardaninis velenas	gaff tipo kardaninis velenas 800 Nm
Kėlimo aukštis	17 m



P.1.9.

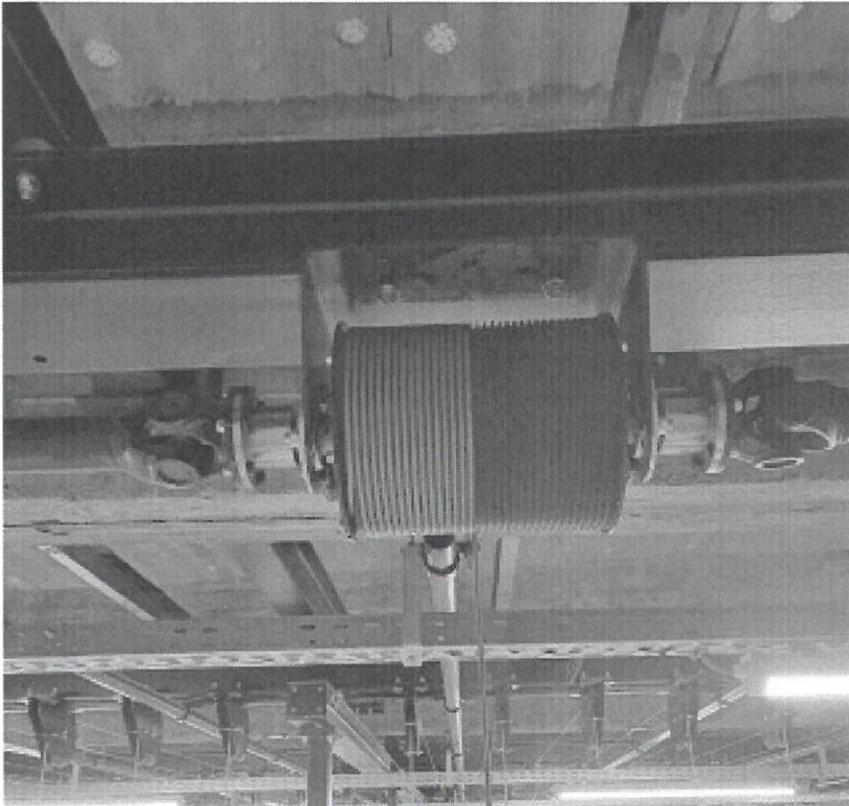


Būgnas.

p.1.7 Būgnai pagaminti iš kompozicinio plastiko PA6, tai dėl mažesnio nuosavo svorio ant stogo konstrukcijos.

Būgnai komplektuojami su ilgaamžiais suteptais rutuliniais guoliais. p.1.8

Būgnai susideda iš 200 mm skersmens būgno su grioveliais, su išdėstymu kairėje ir dešinėje, o plieninio lyno galas pilnai įtvirtintas į būgną (išorėje toje pačioje pusėje per išorę). Tai neleidžia plieniniam lynui peršokti į kitą griovelį.



Plienis lynas.

p.1.9. Ant būgno laikiklio sumontuotas plastikinis apsauginis įtaisas. Tai apsaugo nuo plieninio trosų peršokimo iš griovelio.

Plieninio vielos tvirtinimas stacionariai tvirtinamas arfos tipo užsegimu ir papildomai fiksuojamas. p.1.13

Atsižvelgiant į sistemos veikimo laiko prailginimą, būgnai yra su dešiniojo sukimo plieniniu lynu.

p.1.10. Plieniniai lynai yra cinkuoto padengimo su 7x19 struktūra, saugos koeficientas yra 10 kartų su apkrova 170 kg. Minimali trūkimo apkrova 17,7 kN.

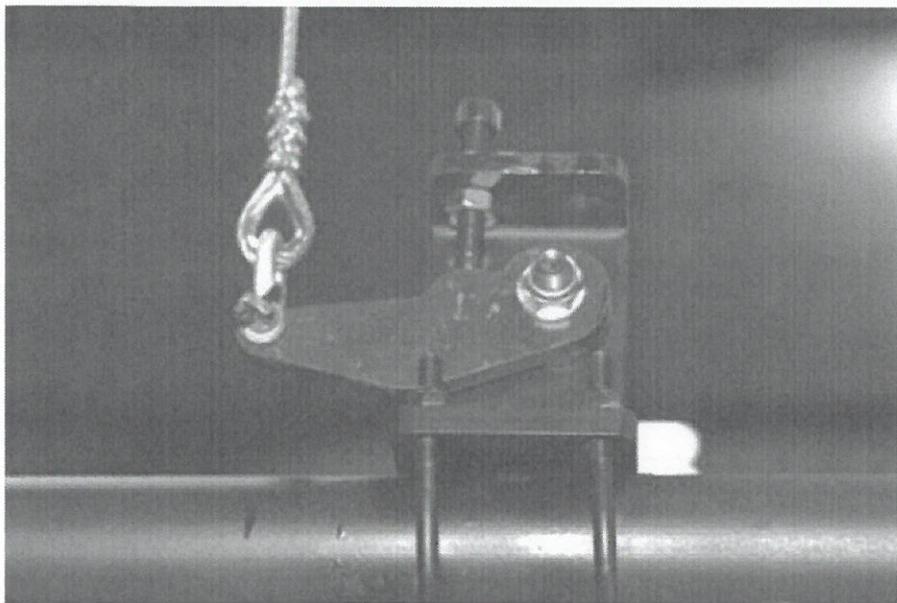
Sukomplektuoti atitinkamo dydžio kabelio lynžiedžiai.

p.1.13

p.1.12

p.1.11

Pakabos taškas



Pavaros.

GFA gamintojo elektros varikliai.

p.1.3. Galia 1,5 kW.
Tipas SI60-24

p.1.1. Reikalingas sukimo momentas tinkamas yra 300 kg svorio štangai + apkrova.
Būgno skersmuo plieninio lyno šerdyje yra 195 mm.

Visą sistemą centralizuotai varo elektros variklis su sukimo eigos jungikliais, kurie turi avarinio išjungimo padėtis aukščiausioje / žemiausioje padėtyse bei /darbines išjungimo/ padėtis aukščiausioje / žemiausioje padėtyse.

p.1.14 Eigos ribinių padėčių jungiklis yra integruotas kartu su pavara.

Pavarą sudaro sliekinio tipo reduktorius su stabdančiu veikimu, su variklio dvigubu stabdžiu ir rankinio stabdžio svirtimis.

TECHNINIAI DUOMENYS SI 60.24

2. Technical data "Rapid Safedrive®"

Drive torque 400Nm - 1.000Nm

ELEKTROMATEN		SI 60.24
Series		SG115F
Output torque	Nm	600
Output speed	rpm	24
Hollow-shaft Ø	mm	55
Locking torque ¹	Nm	2840
Safety brake (approval number)		TorFV 4 / 026
Permitted OPEN / CLOSE output speed in frequency-inverter operating mode ²	rpm	42 / 42
Motor power	kW	1,50
Supply voltage, frequency	V - Hz	3x230/400-50
Nominal current ³	A	6,8 / 3,9
Motor duty cycle	ED	S3-60%
Max. cycles per hour ⁴		30
Supply side wiring / fusing (delayed action)		5x1,5 ² / 10A
Limit switch range ⁵		20 (60, 110)
Max. hand force NHK / KNH ⁴	N	190 / 155
ELEKTROMATEN weight	kg	44
Spare parts: Catalogue page		8.58
Part no. installation drawing (dxf, dwg)		50000830
Part no. ELEKTROMATEN		10002623

Footnotes under 3.

p.1.15. Stabdžiai (dvigubi, tyli versija)

Stabdis taip pat turi guminį tarpiklį, kuris apsaugo nuo drėgmės ir užteršto oro (pavyzdžiui nuo dūmų mašinų). Šie stabdžiai taip pat yra tylios versijos. Stabdžiai yra su rankenomis stabdžių testavimui.

p.2. Dekoracijų traversa

Dekoracijų traversa („štanga“) susideda iš dviejų plieninių vamzdžių, kurių skersmuo 48,3 mm, sienelės storis 2,9 mm.

Vamzdis sujungiamas 10 cm ilgio jungiamuoju vamzdžiu ir suvirinamas.

Štanga pakabinama ant reguliuojamos rankenos pakabos.

p.2 Štangos ilgis 12 m.

p.1.6 4 taškų /lynų/ pakaba.

Pakaba yra su reguliuojama svirtimi ir sužemintu montavimo būdu.

Plieninis lynas tvirtinamas arfos tipo užsegimu ir hidrauliškai užpresuojama galine jungtimi.

Matinė juoda spalva.

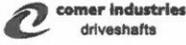
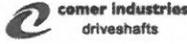
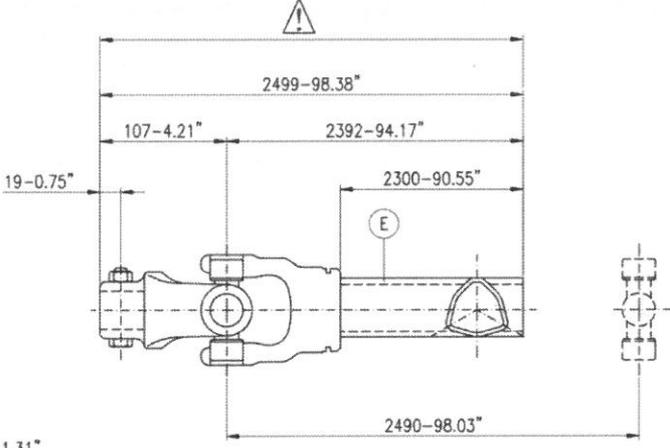
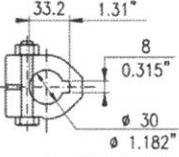
Apkrova žemiau pakabos taško 150 kg.

Apkrova tarp pakabos taško 150 kg.

Apkrova štangos gale 30 kg.

p.1.4.
p.1.5.

Kardaniniai velenai.

	End fittings	Max. torque	Notes:																																									
	Tractor Cod: -	-			Implement Cod: -	540																																						
																																												
																																												
keyway yoke with interfering clamp bolt																																												
The dimensioning is cross to cross																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Cross and tubes</td> <td colspan="2" style="text-align: center;">Data</td> <td colspan="2" style="text-align: center;">r.p.m.</td> <td colspan="2" style="text-align: center;">Data</td> <td colspan="2" style="text-align: center;">r.p.m.</td> <td rowspan="2" style="text-align: center;">100 min.⁻¹ r.p.m. max.</td> <td colspan="2" style="text-align: center;">Data for only critical velocity</td> <td rowspan="2" style="text-align: center;">Customer:</td> </tr> <tr> <td style="text-align: center;">27</td> <td style="text-align: center;">74.6</td> <td style="text-align: center;">KW</td> <td style="text-align: center;">CV</td> <td style="text-align: center;">Nm.</td> <td style="text-align: center;">br.Nm.</td> <td style="text-align: center;">KW</td> <td style="text-align: center;">CV</td> <td style="text-align: center;">Nm.</td> <td style="text-align: center;">in.lb.</td> <td style="text-align: center;">540 r.p.m.</td> <td style="text-align: center;">1000 r.p.m.</td> <td rowspan="2" style="text-align: center;">Checked: _____ Signed by: P.L.</td> </tr> <tr> <td colspan="2" style="text-align: center;">  </td> <td style="text-align: center;">540</td> <td style="text-align: center;">4050</td> <td style="text-align: center;">-</td> <td style="text-align: center;">Date: 12-09-20</td> </tr> </table>					Cross and tubes		Data		r.p.m.		Data		r.p.m.		100 min. ⁻¹ r.p.m. max.	Data for only critical velocity		Customer:	27	74.6	KW	CV	Nm.	br.Nm.	KW	CV	Nm.	in.lb.	540 r.p.m.	1000 r.p.m.	Checked: _____ Signed by: P.L.			540	4050	-	-	-	-	-	-	-	-	Date: 12-09-20
Cross and tubes		Data		r.p.m.		Data		r.p.m.		100 min. ⁻¹ r.p.m. max.	Data for only critical velocity		Customer:																															
27	74.6	KW	CV	Nm.	br.Nm.	KW	CV	Nm.	in.lb.		540 r.p.m.	1000 r.p.m.		Checked: _____ Signed by: P.L.																														
		540	4050	-	-	-	-	-	-	-	-	Date: 12-09-20																																

Valdymo sistema CS-12

p.3.1

p.3.2

Komplektuojamas centrinis specialios konstrukcijos skydelis 12 keltuvų, kuriuo jie yra valdomi. Valdymo sistemos sudėtyje yra laidinis nuotolinis pultas ir e-stop /avarinio stabdymo/ sistema su specialiu valdymo moduliu, kuris tikrina visus saugos /sistemos/ komponentus. Valdymo skydo sudėtyje:

12 jungiklių keltuvams įjungti

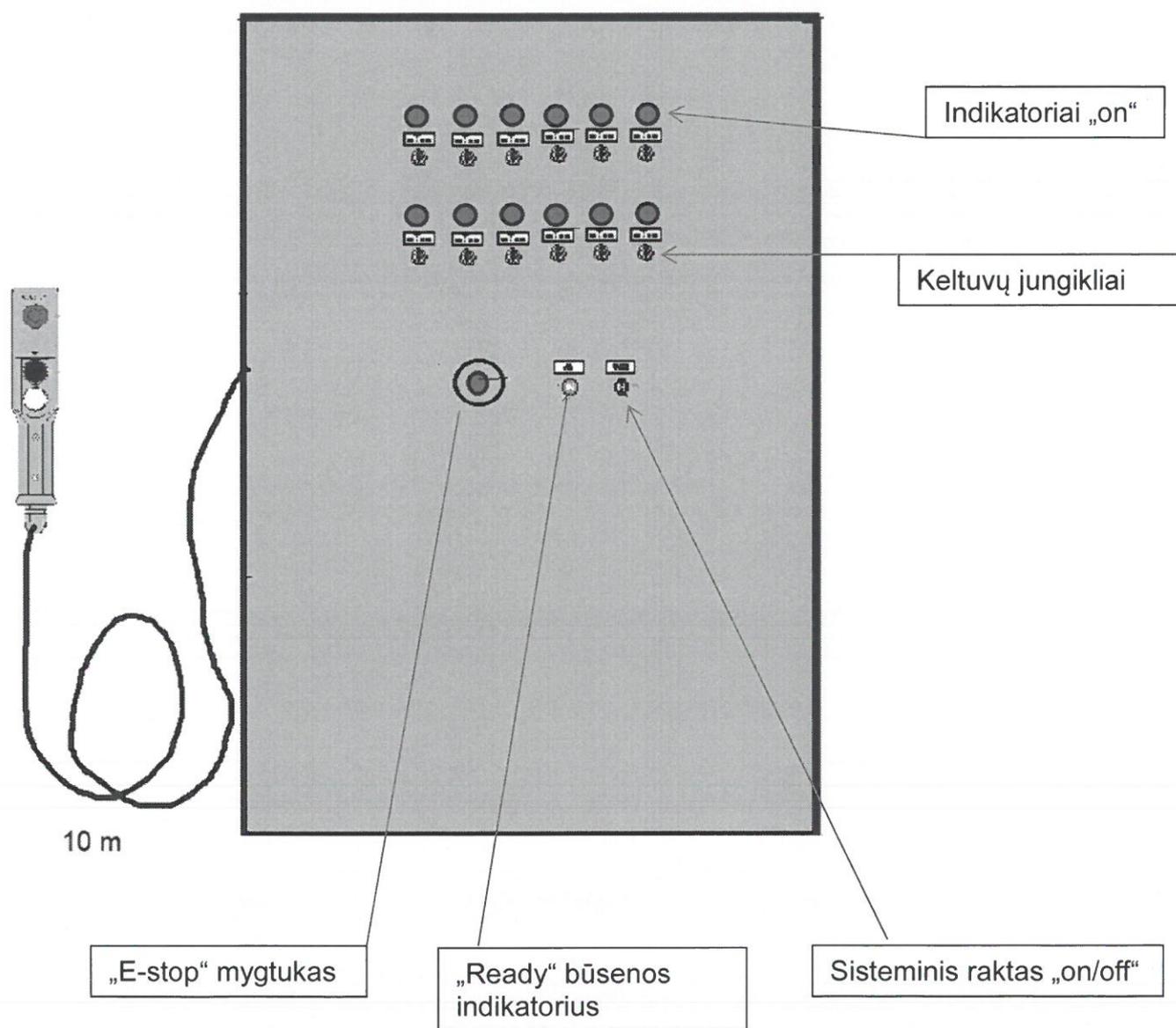
12 indikacijos lempučių "on" p.3.1.

Sisteminis raktas "on/off"

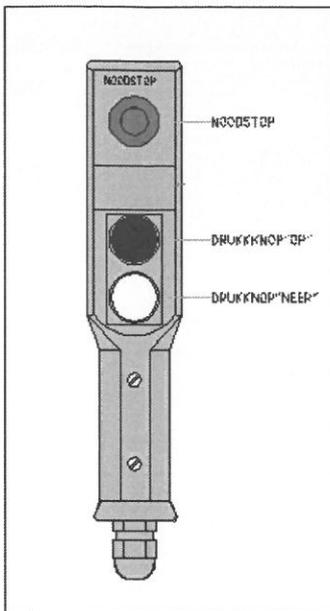
Žalia indikacinė lempa sistemos pasirengimui indikuoti. Suveikus "E-stop" sistemai lempa užgesta.

"E-stop" mygtukas p.3.2

Nuotolinis valdiklis su 10 m kabeliu ir mygtukais "Go" ir "E-stop"



NUOTOLINIO VALDYMO PULTAS



AVARINIS SUSTOJIMAS

Avarinis sustabdymas atjungia valdiklį.

MYGTUKAS AUKŠTYN („UP“)

Mygtukas UP skirtas štangoms pakelti.

MYGTUKAS ŽEMYN („DOWN“)

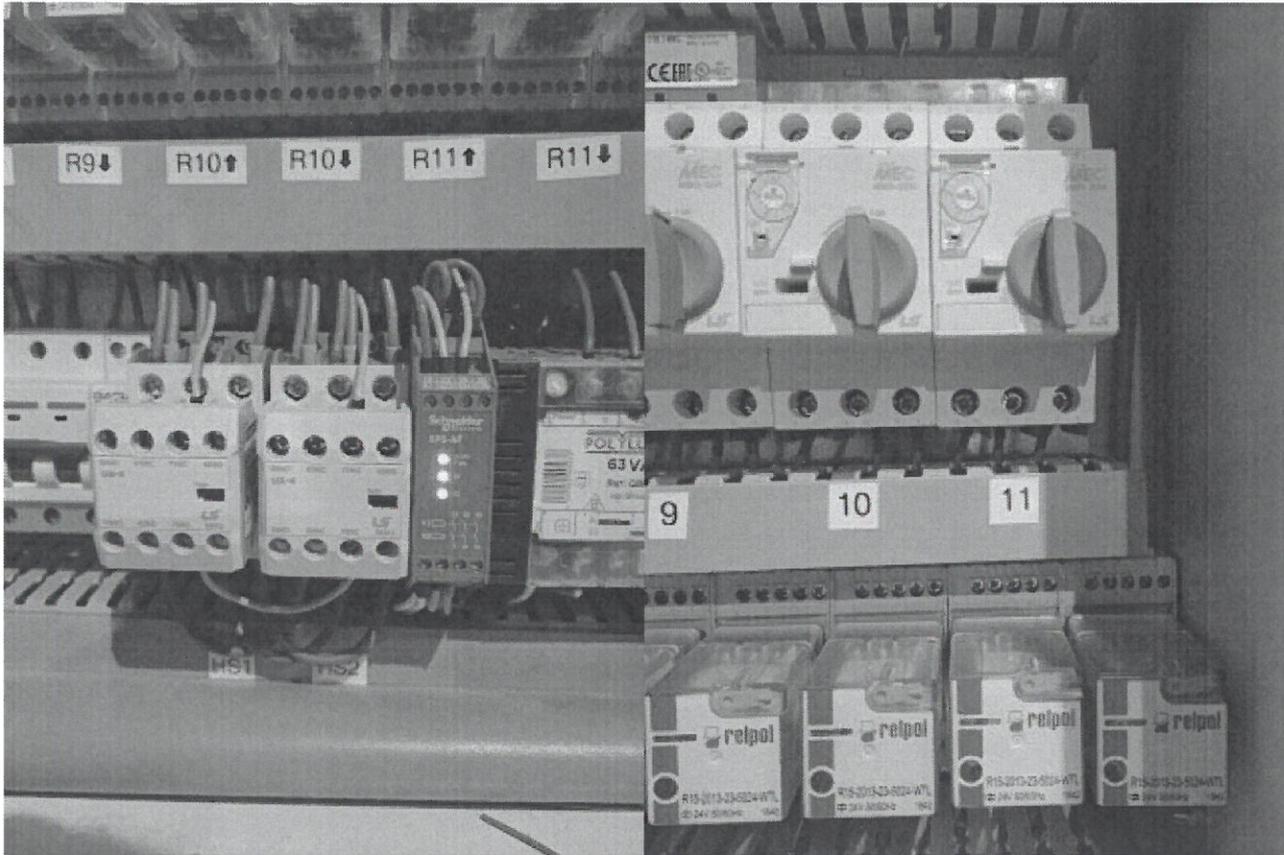
Mygtukas DOWN skirtas štangoms nuleisti.

Avarinio stabdymo sistema

p.3.2.

Valdymo sistemoje yra avarinio stabdymo modulis atitinkantis SIL2.

Specialus kontrolinis modulis tikrina visų sistemos saugos komponentų būseną ir indikuoja apie sistemos būklę tiek laiko, kiek sistemos būklė yra aktyvi.



Maitinimo ir valdymo kabelius turi tiekti ir montuoti trečiosios šalys.

Maitinimas 400 V RST+N+A.

Variklio maitinimo kabeliai 5 x 1,5 mm².

Apsauga nuo perkrovos

p.3.2

Pagal standartą EN 17206, /mechanizmo/ eiga turi turėti perkrovos /kontrolės/ galimybę. Šioje instaliacijoje sprendimas yra įjungti apsaugą srovės mažinimu keliant aukštyn, kai pakeliamas per didelis svoris, variklis sunaudoja daugiau srovės, todėl inicijuojamas įrenginio sustojimas. Perkrovos metu nebegalima judėti aukštyn, galima tik nusileisti. Perkrovos atveju užsidega raudona lemputė.

Jis užgęsta, kai suaktyvinamas judėjimas žemyn, įjungiant atstatymo relę („relais reset overload“).

Šios apsaugos nuokrypis nuo didžiausios apkrovos yra 10–20 % ribose. tai matuojama judesiui aukštyn

