

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

www.elkos.nt-rt.ru | | eow@nt-rt.ru

Технические характеристики на панели управления для пожарных электронасосов SNFD, SNFST, NFJ-M4/10, NFJ-P4/10 компании ELCOS



SNFD

COMPLIANT TO EN12845 STANDARD

Automatic control panels for electric pump complying with standard EN12845 with direct starting, equipped with CEA-SMART025 control unit with digital instruments, signalling and warnings on LCD graphic display and with RS-485 serial connection for remote signalling.

KEY FEATURES

- Digital instruments (3 mains voltmeters, ammeter max 1000A, mains frequency meter, wattmeter, varmeter, voltammeter, cosphimeter, total hour meter, partial hour meter).
- Low voltage control circuit input.
- Electric pump contactors AC3.
- Button for test of the warning lights.
- Starting stop buttons.
- Historical report.
- Direct automatic starting.

IDENTIFICATION DATA

Type	kW	In (A)	hP	Dimensions HxWxD (mm)	Code
SNFD-4	4	8	5,5	500 x 400 x 200	00023035
SNFD-5,5	5,5	11	7,5	500 x 400 x 200	00023036
SNFD-7,5	7,5	15	10	500 x 400 x 200	00023037

SNFD-9,2	9,2	19	12,5	500 x 400 x 200	00023038
SNFD-11	11	23	15	500 x 400 x 200	00023039
SNFD-15	15	29	20	500 x 400 x 200	00023040
SNFD-18,5	18,5	40	25	600 x 400 x 200	00023041
SNFD-22	22	50	29	600 x 400 x 200	00023042
SNFD-30	30	63	40	600 x 400 x 200	00023043

CONTROL PANELS FOR THREE-PHASE ELECTRIC COMPENSATION

PUMP (Jockey Pump)

The small pump is used to integrate small water leaks and keep the system pressurized.

Power supply 3 ~ 50/60Hz 400V 4kW

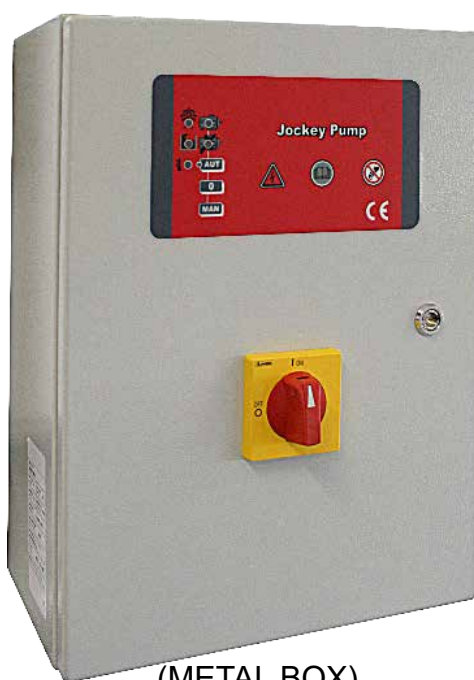
- low voltage circuit inputs
- adjustable electronic control for motor overload
- output for general alarm and thermal cut-out tripped alarm
- direct starting (4kW)



(ABS BOX)

TYPE NFJ-P4/10

Dimensions (LxHxD) 240x320x190 mm



(METAL BOX)

TYPE NFJ-M4/10

Dimensions (LxHxD) 300x400x230 mm

BRIEF INSTRUCTIONS

Warning lights and control commands

The control panel is designed for the adjustable protection of 1 motor, the command for which is given through external contacts such as float or pressure switch.

DESCRIPTION OF WARNING LIGHTS AND CONTROLS

	Green LED indicating mains voltage is present QUICK FLASHING green led (1 second) minimum current control enabled Green led OFF electric pump on standby
	Green LED indicating the electric pump is running Green led OFF electric pump on standby
	Red LED indicating the motor has a tripped thermal protector
	not used
	Green button and LED for automatic operation Button for alarm reset (when pressed for 2 seconds) SLOW FLASHING green led motor current calibration mode (Max)
	Button motor operation stop or standby
	Button for manual operation

General operating guidelines

After connecting the panel to the mains power and with the door interlock switch in the ON position, the green LED indicating that voltage is present in the panel lights up.

When first switched on, the panel starts in Automatic mode (indicated by the green LED on the "AUT" button). If the motor is enabled, this will be indicated by the green LED indicating the electric pump is running.

When buttons    are pressed, it is possible to set the following.

 : starting of the motor in Automatic mode, set by probes, floats or pressure switches and reset if the thermal cut-out of the motor has tripped (when pressed for 2 seconds)

 : manual switching off of the motor and reset

 : starting of the motor in Manual mode by the operator holding down the button.

DIRECTIONS

Its sole function is to monitor and control the pressure maintenance pump (Jockey Pump). It is made to be wall mounted indoors.



Warning: live parts at dangerous voltage

The inside of the panel may be accessed only by suitably trained staff put in charge for the purpose.

No maintenance operations may be carried out unless the system is disconnected from the mains. Making an exception to the above, only trained staff put in charge may carry out the following operations with the system live:

- visual inspection of the boards, connections and identification marks;
- measurement of the voltage and/or current values, modification of thresholds and programming settings.

These operations must in any case be carried out using equipment that ensures appropriate electrical protection.



Warning: Strictly comply with the following advice

- At the mains installation point, the prospective short circuit current must not exceed 10 kA.
- Check that the consumption of the powered appliances is compatible with the technical characteristics on page 8.
- Install so as to always allow adequate heat disposal.
- Always install in a position that is lower than other appliances that produce or dissipate heat.
- Do not allow pieces of copper wire or other metal residues to fall inside the panel.
- If necessary, replace the fuse only with a type that is identical to the original.

THIS PANEL IS NOT SUITABLE FOR OPERATING IN THE FOLLOWING CONDITIONS:

- Where the ambient temperature exceeds the limits specified on page 8.
- Where the air temperature and pressure variations are so rapid as to produce exceptional condensation.
- Where there is a high level of pollution caused by dust, smoke, vapours, salts and corrosive or radioactive particles.
- Where heat radiation is high due to the sun, ovens or the like.
- Where attacks from mould or small animals are possible.
- Where there is a risk of fire or explosion.
- Where hard knocks or vibrations can be transmitted to the panel.

OPERATION AND MAINTENANCE

We recommend that the following maintenance operations be carried out weekly:

- Automatic start-up.
- Checking of the operation of the warnings.
- Checking of the tightness of the conductors and the condition of the terminals.

ELECTROMAGNETIC COMPATIBILITY

This panel works correctly only if it is inserted in systems that comply with CE marking regulations; in fact, it itself complies with the immunity requirements of standard EN61326-1, but this does not rule out malfunctioning in extreme cases that can occur in particular situations. It is the installer's job to verify the absence of disturbance levels higher than those provided for by the regulations.

NOTE ON CONNECTION OF THE CONTROL AND SAFETY DEVICES TO THE PANEL

In the event of direct connection to the panel of motor protection probes, or contacts for remote monitoring or control, particular failure conditions (such as grounding failures or disconnection of electrical connections) can prevent starting or cause untimely starting. If considered advisable, to reduce these risks, the installer can adopt the measures described in sections 9.4.2.1 and 9.4.2.2 of standard IEC EN60204-1 (Italian CEI 44-5) for these connections.

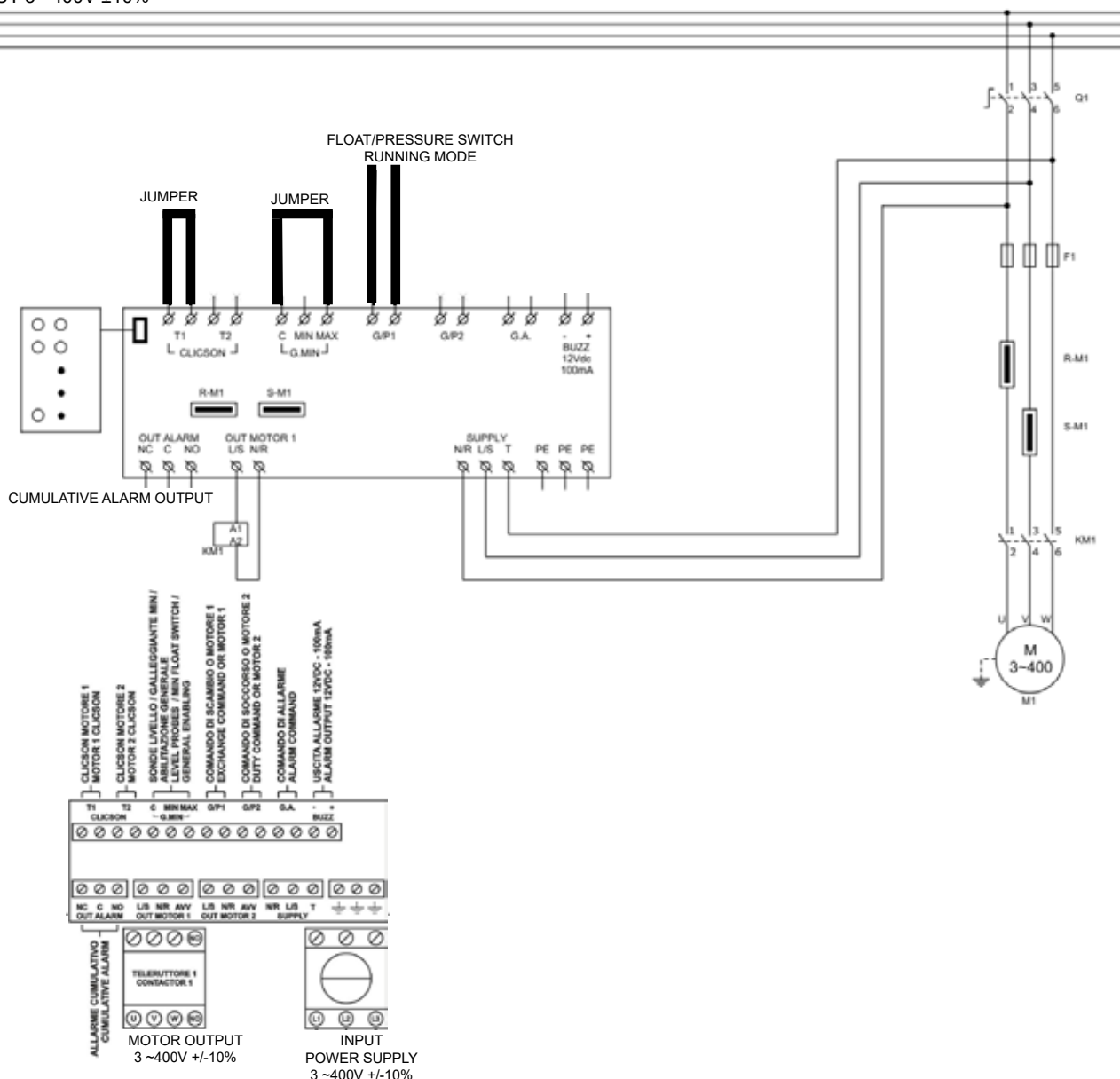
UNLESS WE HAVE ISSUED A WRITTEN DECLARATION TO THE CONTRARY, THIS PANEL IS NOT SUITABLE FOR USE AS A CRITICAL COMPONENT IN EQUIPMENT OR SYSTEMS ON WHICH THE LIFE OF PEOPLE AND OTHER LIVING BEINGS DEPENDS.

YOUR ELECTRICAL TECHNICIAN CAN ASK US ANY QUESTIONS ABOUT THIS PANEL
BY CONSULTING ONE OF OUR TECHNICIANS BY PHONE



THREE-PHASE CONNECTION DIAGRAM

POWER INPUT 3 ~400V ±10%



NOTES

The power line must be protected by a residual current device.

Tighten the power cables in the terminals using a suitably sized tool so as not to damage the screws of the fixing.

Check that the supply voltage of the mains power corresponds to the voltage indicated on the plate of the control panel and of the motor connected to the panel, and then make the ground connection before any other connection.

The control panel has provision for wall mounting with screws and wall anchors using the holes in the corners of the box or the brackets when present.

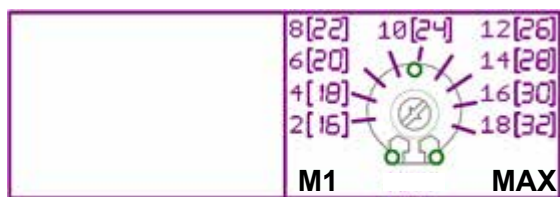


N. B.: motor operation in Automatic mode is given by the closing of contact G1/P1, to which a pressure switch or float can be connected. If G1/P1 is not used, the contact must be jumpered. For PUMP RUNNING use the N.O. free contact of contactor K1 installed in the panel.

SETTINGS AND ADJUSTMENTS

Current protection

Factory setting 1 kW (2A).



The first time the panel is switched on, the overload protection (or thermal cut-out) must be set, according to the absorption of the electric motor connected to the panel, using the “M1 MAX” trimmer. The “MAX” trimmer enables adjustment of the maximum motor current, over which the system protection trips due to current overload.

If the nominal motor current is known, set a value higher by approx. 15%, according to the screen printing of the board.



N.B. To calibrate the maximum current, the motor must be started up with water present.

DIP-SWITCH SETTINGS

Set DIP-SWITCHES with the panel switched off.

Number dip	Position	Description
DIP 1	OFF	LEAVE OFF
	ON	
DIP 2	OFF	Delay of motor thermal cut-out activation by 5 seconds
	ON	Delay of motor thermal cut-out activation by 10 seconds
DIP 3	OFF	LEAVE OFF
	ON	
DIP 4	OFF	LEAVE OFF
	ON	
DIP 5	OFF	LEAVE ON
	ON	
DIP 6	OFF	LEAVE OFF
	ON	
DIP 7	OFF	Disable of board delay on power supply failure
	ON	Delayed board activation on power supply failure
DIP 8	OFF	LEAVE OFF
	ON	

DIP-SWITCH 2 enables selection of the thermal cut-out activation delay time of 5 or 10 seconds. The setting of this parameter prevents activation of the overload thermal cut-out during motor start-up, thereby avoiding a start-up current.

DIP-SWITCH 7 enables delayed board activation in the event of an electrical power supply failure. On return of power, the board enables the inputs and outputs after a delay interval of 30 seconds. After a power supply failure, the panel is reactivated maintaining the previous AUT 0 MAN status.

Leave the 4 DIP SWITCHES in the door OFF.

DIAGNOSTICS

	Problem	Checks/Solutions
1.	THE PANEL IS POWERED UP BUT DOES NOT START UP IN AUTOMATIC MODE.	• Check that the green warning light on the automatic button is on, and press on the button if it is not on.
2.	THE PANEL IS SET TO AUTOMATIC MODE BUT THE PUMP DOES NOT START.	• Ensure that inputs "G/P1" and "COM-MIN-MAX" are closed. • Ensure correct operation of the floats. • Check that the normally open inputs are closed • Check that the float is working correctly. • Check that the normally open inputs are closed. • Check that terminals "U1" and "N1" output terminals on the model check that the 400V~ voltage is present and that the contactor winding is powered. • Check settings of the DIP-SWITCHES.
3.	ON START-UP OF THE PUMP, THE THERMAL CUT-OUT TRIPS	• Check the setting of the MAX trimmer or that the set current is approx. 15% higher with respect to the nominal motor current (see page 16). • Check that the thermal cut-out activation delay is sufficient on DIP SWITCH 2.
4.	THE THERMAL CUT-OUT DOES NOT TRIP	• Check the setting of the MAX trimmer or that the set current is approx. 15% higher with respect to the nominal motor current
5.	DO NOT TURN ON ANY LIGHT ON THE CONTROL PANEL	• Check that the FLAT connector is inserted correctly. • Ensure that the door lock is set to ON. • On the panel input, check that the voltages 400V~ are present between the mains input terminals "SUPPLY". • Check that the fuses are efficient".

LIST OF COMPONENTS

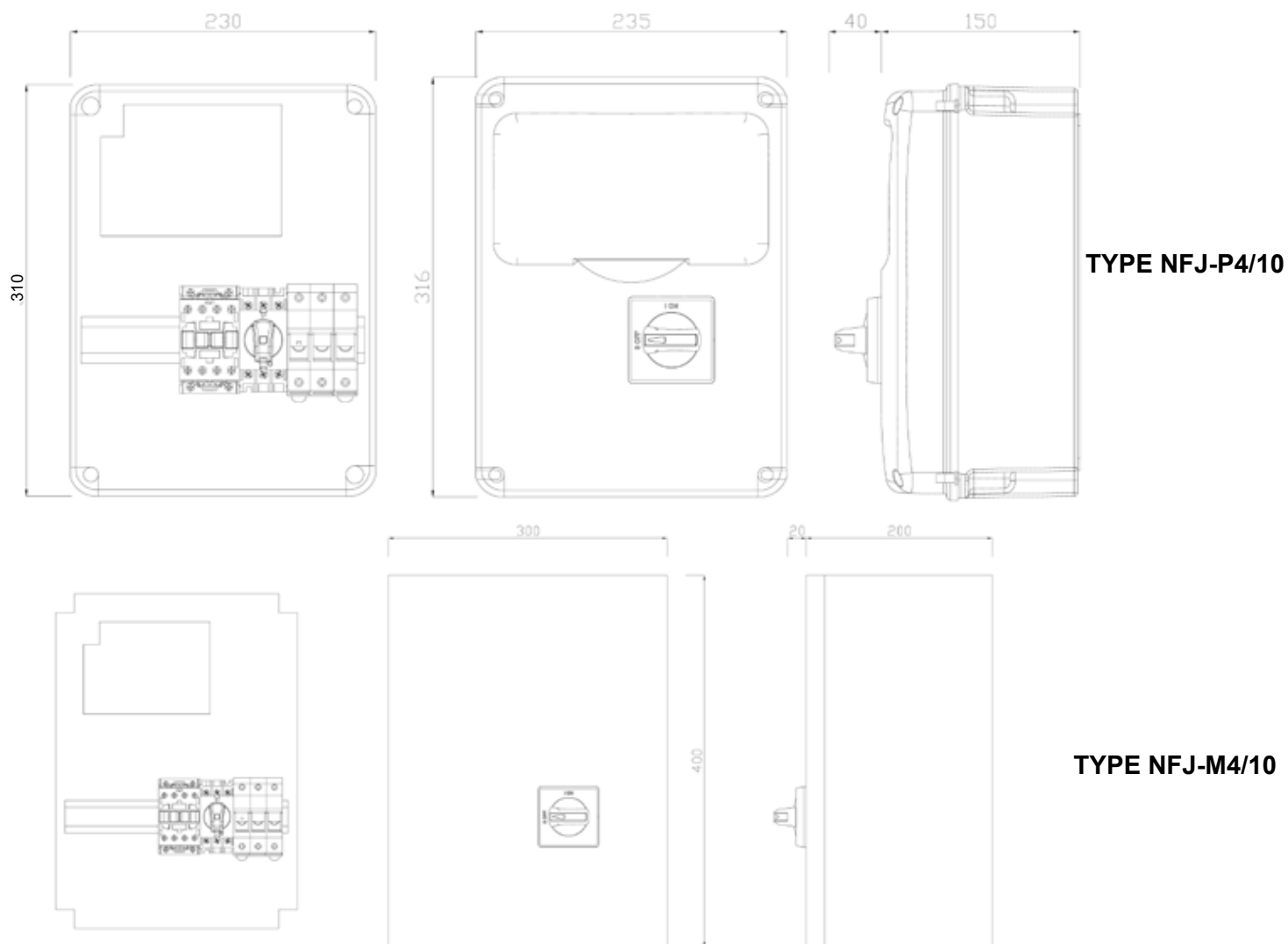
PANEL TYPE NFJ-P4/10

ABBREV.	Q.TY	DESCRIPTION	CHARACTERISTICS	CODE	MAKE
Q1	1	3-POLE DOOR INTERLOCK DISCONNECT SWITCH	3P 32A V235	GA032A	LOVATO
-	1	YELLOW/RED DOOR INTERLOCK CONTROL	-	GAX63V235	LOVATO
-	1	DOOR INTERLOCK SHAFT	82 MM	GAX7082	LOVATO
F1	1	3-POLE DISCONNECTABLE FUSE HOLDER	3P 10X38 NO UR	FB01B3P	LOVATO
F1 (FUSE)	3	FUSES	10X38 10A AM 500V	5400610	WIMEX
KM1	1	MOTOR CONTACTOR	AX09-30-01-81 3P 9A 400VAC	AX09300181	ABB
-	1	GREY ABS PLASTIC BOX	320x240x150		

PANEL TYPE NFJ-M4/10

ABBREV.	Q.TY	DESCRIPTION	CHARACTERISTICS	CODE	MAKE
Q1	1	3-POLE DOOR INTERLOCK DISCONNECT SWITCH	3P 32A V235	GA032A	LOVATO
-	1	YELLOW/RED DOOR INTERLOCK CONTROL	-	GAX63V235	LOVATO
-	1	DOOR INTERLOCK SHAFT	82 MM	GAX7082	LOVATO
F1	1	3-POLE DISCONNECTABLE FUSE HOLDER	3P 10X38 NO UR	FB01B3P	LOVATO
F1 (FUSE)	3	FUSES	10X38 10A AM 500V	5400610	WIMEX
KM1	1	MOTOR CONTACTOR	AX09-30-01-81 3P 9A 400VAC	AX09300181	ABB
-	1	GREY METAL BOX	400x300x200		

DIMENSIONS



TECHNICAL DATA	
Nominal mains voltage	Three-phase 400 VAC
Frequency	50 to 60Hz
Power supply tolerance	±10%
Category of use of electric pump contactors	AC3
Capacity of contacts for remote monitoring	MAX 5A (AC1) 250VAC
Insulation class	CLASS 1
Protection rating	IP55
Temperature limits	-5/+40°C
Relative humidity	50% at +40°C
Installation conditions	FOR INDOOR USE
Weight NFJ-P4/10	2 kg
“ NFJ-M4/10	7 kg

DATA FOR ORDERING				SUPPLIED ACCESSORIES	
Panel Type	NFJ-P4/10	Code	00023001		
“	NFJ-M4/10	“	00023002		

CONTROL PANEL FOR ELECTRIC FIRE-FIGHTING PUMPS

Type: SNFST

Compliant with Standard UNI EN 12845.

Avviamento del motore STELLA-TRIANGOLO.

INSTALLATION MANUAL



Type	kW	In (A)	hP	Dimensions LxHxW(mm)
SNFST-15	15	31	20	600 x 400 x 200
SNFST-18,5	18,5	38	25	
SNFST-22	22	50	30	
SNFST-30	30	62	40	700 x 500 x 200
SNFST-37	37	75	50	
SNFST-45	45	100	60	
SNFST-55	55	124	74	800 x 600 x 300
SNFST-75	75	135	100	
SNFST-90	90	155	120	
SNFST-110	110	200	147	1300 x 800 x 300
SNFST-132	132	241	177	
SNFST-160	160	280	214	
SNFST-200	200	350	268	1500 x 800 x 400
SNFST-250	250	430	335	

Three-phase power supply 400Vac 50/60Hz.

Equipped with:

- Automatic CEA-SMART025 type control unit.
- Contactors
- Terminals for interconnection with engine.
- Emergency start buttons.
- Manual-Off-automatic selector.
- Low-voltage control inputs.

COMPONENTS LIST SNFST-15					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X32A	GA032A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX631BV238	LOVATO
Q1	1	TREE DOOR LOCK	132 MM	GAX7132	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 100VA	ETKT1B01000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU1 (FUSE)	3	FUSES	10X38 32A AM 500V	5400632	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 4A GT	5000457U	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX25-30-01-81 3P 25A 24-60VAC /DC	AX25300181	ABB
KM2	1	STAR CONTACTOR	AX12-30-01-81 3P 12A 24-60VAC /DC	AX12300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX25-30-01-81 3P 25A 24-60VAC /DC	AX25300181	ABB
KM2	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
KM3	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
TA1	1	CURRENT TRANSFORMER	50/5A	DM0T0050	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	ZS4	K505010	ABB
X2	6	POWER TERMINAL BLOCK	ZS10	K508010	ABB
AP1	1	GREY METAL BOX	600x400x200	LN642	GROSSULE

COMPONENTS LIST SNFST-18,5					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X40A	GA040A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX631BV238	LOVATO
Q1	1	TREE DOOR LOCK	132 MM	GAX7132	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 100VA	ETKT1B01000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 14X51 NO UR	FB02A3P	LOVATO
FU1 (FUSE)	3	FUSES	14X51 40A AM 500V	5400740	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 4A GT	5000457U	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX25-30-01-81 3P 25A 24VAC	AX25300181	ABB
KM2	1	STAR CONTACTOR	AX18-30-01-81 3P 18A 24VAC	AX18300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX25-30-01-81 3P 25A 24VAC	AX25300181	ABB
KM2	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
KM3	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
TA1	1	CURRENT TRANSFORMER	50/5A	DM0T0050	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	ZS4	K505010	ABB
X2	6	POWER TERMINAL BLOCK	ZS10	K508010	ABB
AP1	1	GREY METAL BOX	600x400x200	LN642	GROSSULE

COMPONENTS LIST SNFST-22					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X63A	GA063A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX631BV238	LOVATO
Q1	1	TREE DOOR LOCK	132 MM	GAX7132	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 100VA	ETKT1B01000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 14X51 NO UR	FB02A3P	LOVATO
FU1 (FUSE)	3	FUSES	14X51 50A AM 500V	5400750	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 4A GT	5000457U	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX32-30-01-81 3P 32A 24VAC	AX32300181	ABB
KM2	1	STAR CONTACTOR	AX25-30-01-81 3P 25A 24VAC	AX25300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX32-30-01-81 3P 32A 24VAC	AX32300181	ABB
KM2	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
KM3	1	NC CONTACT CONTACTOR	CA-510	CA510	ABB
TA1	1	CURRENT TRANSFORMER	50/5A	DM0T0050	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	ZS4	K505010	ABB
X2	6	POWER TERMINAL BLOCK	ZS10	K508010	ABB
AP1	1	GREY METAL BOX	600x400x200	LN642	GROSSULE

COMPONENTS LIST SNFST-30					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X63A	GA063A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX631BV238	LOVATO
Q1	1	TREE DOOR LOCK	182 MM	GAX7182	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 200VA	ETKT1B02000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 22X58 NO UR	FB03A3P	LOVATO
FU1 (FUSE)	3	FUSES	22X58 63A AM 500V	5400863	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 10A GT	5004561	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX40-30-01-81 3P 40A 24VAC	AX40300181	ABB
KM2	1	STAR CONTACTOR	AX25-30-01-81 3P 25A 24VAC	AX25300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX40-30-01-81 3P 40A 24VAC	AX40300181	ABB
TA1	1	CURRENT TRANSFORMER	50/5A	DM0T0050	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	WT 2,5	58.503.0055.0	WIELAND
X2	6	POWER TERMINAL BLOCK	WT 16	58.516.0055.0	WIELAND
AP1	1	GREY METAL BOX	700x500x200	LN752	GROSSULE

COMPONENTS LIST SNFST-37					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X80A	GA080A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX63V235	LOVATO
Q1	1	TREE DOOR LOCK	182 MM	GAX7182	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 200VA	ETKT1B02000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 22X58 NO UR	FB03A3P	LOVATO
FU1 (FUSE)	3	FUSES	22X58 80A AM 500V	5400880	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 10A GT	5004561	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX50-30-11-81 3P 50A 24VAC	AX50301181	ABB
KM2	1	STAR CONTACTOR	AX32-30-01-81 3P 32A 24VAC	AX32300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX50-30-11-81 3P 50A 24VAC	AX50301181	ABB
TA1	1	CURRENT TRANSFORMER	80/5A	DM0T0080	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	ZS4	K505010	WIELAND
X2	6	POWER TERMINAL BLOCK	ZS35	K508010	WIELAND
AP1	1	GREY METAL BOX	700x500x200	LN752	GROSSULE

COMPONENTS LIST SNFST-45					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH 3 POLE	3P 3X125A	GA125A	LOVATO
Q1	1	DOOR LOCK GREY-BLACK PADLOCKABLE ON	-	GAX631BV238	LOVATO
Q1	1	TREE DOOR LOCK	182 MM	GAX7182	LOVATO
T1	1	TRANSFORMER	0-230-400/24V+FUSE 200VA	ETKT1B02000	BIMEC
FU1	1	FUSE HOLDER 3 POLE	3P 22X58 NO UR	FB03A3P	LOVATO
FU1 (FUSE)	3	FUSES	22X58 100A AM 500V	5400890	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	FB01B3P	LOVATO
FU2 (FUSE)	3	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	FB01B2P	LOVATO
FU3 (FUSE)	2	FUSES	10X38 1A AM 500V	5400601	WIMEX
FU4 (T1)	1	TRANSFORMER FUSE HOLDER	-	-	BIMEC
FU4 (FUSE)	1	FUSE	5X20 10A GT	5004561	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	FB01B1P	LOVATO
FU5 (FUSE)	1	FUSE	10X38 1A AM 500V	5400601	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AX65-30-11-81 3P 65A 24VAC	AX65301181	ABB
KM2	1	STAR CONTACTOR	AX40-30-01-81 3P 40A 24VAC	AX40300181	ABB
KM3	1	TRIANGLE CONTACTOR	AX65-30-11-81 3P 65A 24VAC	AX65301181	ABB
TA1	1	CURRENT TRANSFORMER	100/5A	DM0T0100	LOVATO
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	ZS4	K505010	WIELAND
X2	6	POWER TERMINAL BLOCK	ZS35	K508010	WIELAND
AP1	1	GREY METAL BOX	700x500x200	LN752	GROSSULE

COMPONENTS LIST SNFST-55					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3P 125A	-	38313012	SOCOME
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOME
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOME
Q1	2	UPWARD AND DOWNSTREAM COVERAGE	-	39983016	SOCOME
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONO
FU1 (FUSE)	3	FUSES NH-00 125A	125A NH00	5505082	WIMEX
FU2	1	FUSE HOLDER 13POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A-500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A-500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A 500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A-500V	5400101	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF80-30-00-11	AF80300011	ABB
KM2	1	STAR CONTACTOR	AF52-30-00-11	AF52300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF80-30-00-11	AF80300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	150/5A	TA42650C150	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.70/GR	GA400R	CABUR
AP1	1	GREY METAL BOX	800X600X300	LN806030002	GROSSULE

COMPONENTS LISTS NFST-75					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3P 160A	-	38313015	SOCOME
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOME
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOME
Q1	2	UPWARD AND DOWNSTREAM COVERAGE	-	39983016	SOCOME
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONO
FU1 (FUSE)	3	FUSES	160A NH00	5505083	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1" 500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A 500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A-500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF96-30-00-11	AF96300011	ABB
KM2	1	STAR CONTACTOR	AF52-30-00-11	AF52300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF96-30-00-11	AF96300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	200/5A	TA42650C200	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.70/GR	GA400R	CABUR
AP1	1	GREY METAL BOX	800X600X300	LN806030002	GROSSULE

COMPONENTS LIST SNFST-90					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3P 250 A	-	38313024	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOMECC
Q1	2	UPWARD AND DOWNSTREAM COVERAGE	-	39983025	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONO
FU1 (FUSE)	3	FUSES	200A NH1	5507200	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A 500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A-500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A-500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF116-30-11-11	AF116300011	ABB
KM2	1	STAR CONTACTOR	AF65-30-00-11	AF65300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF116-30-11-11	AF116300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	200/5A	TA42650C200	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.70/GR	GA400R	CABUR
AP1	1	GREY METAL BOX	1000X800X300	LN1008030002	GROSSULE

COMPONENTS LIST SNFST-110					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3P 250 A	-	38313024	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOMECC
Q1	2	UPWARD AND DOWNSTREAM COVERAGE	-	39983025	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONO
FU1 (FUSE)	3	FUSES	200A NH1	5507200	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A-500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A 500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A 500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF146-30-11-11	AF146300011	ABB
KM2	1	STAR CONTACTOR	AF96-30-00-11	AF96300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF146-30-11-11	AF146300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	300/5A	TA54050C300	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.70/GR	GA400R	CABUR
AP1	1	GREY METAL BOX	1300X800X300	LN1308030002	GROSSULE

COMPONENTS LIST SNFST-132					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3P 250 A	-	38313024	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOMECC
Q1	2	UPWARD AND DOWNSTREAM COVERAGE	-	39983025	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONOC
FU1 (FUSE)	3	FUSES	250A NH1	55087250	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A-500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A-500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A 500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF146-30-11-11	AF146300011	ABB
KM2	1	STAR CONTACTOR	AF96-30-00-11	AF96300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF146-30-11-11	AF146300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	300/5A	TA54050C300	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.95/GR	GA100GR	CABUR
AP1	1	GREY METAL BOX	1300X800X300	LN1308030002	GROSSULE

COMPONENTS LIST SNFST-160					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3X400A NH2	-	38313039	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOMECC
Q1	2	FUSERBLOC 3P 400A TERMINAL COVERS	-	39983025	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONOC
FU1 (FUSE)	3	FUSES	315A NH2	5508315	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A 500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A 500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A-500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTRIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF190-30-11-11	AF190300011	ABB
KM2	1	STAR CONTACTOR	AF146-30-00-11	AF146300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF190-30-11-11	AF190300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	300/5A	TA54050C300	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
-	2	COVER FOR AF116->AF370 TERMINALS	LT370-30L	LT370-30L	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.150/GR	GA200GR	CABUR
AP1	1	GREY METAL BOX	1300X800X300	LN1308030002	GROSSULE

COMPONENTS LIST SNFST-200					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3X400A NH2	-	38313039	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 320mm	-	14001032	SOCOMECC
Q1	2	FUSERBLOC 3P 400A TERMINAL COVERS	-	39983025	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 200VA	70512211	CIRIACONO
FU1 (FUSE)	3	FUSES	400A NH2	5508400	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A 500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A-500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A 500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF205-30-11-11	AF205300011	ABB
KM2	1	STAR CONTACTOR	AF146-30-00-11	AF146300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF205-30-11-11	AF205300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	400/5A	TASI50C400	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
-	2	COVER FOR AF116->AF370 TERMINALS	LT370-30L	LT370-30L	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.150/GR	GA200GR	CABUR
AP1	1	GREY METAL BOX	1300X800X300	LN1308030002	GROSSULE

COMPONENTS LIST SNFST-250					
Item	Q.TY	Description	Features	Code	Make
Q1	1	DISCONNECT SWITCH FUSERBLOC 3X630A NH3	-	38313063	SOCOMECC
Q1	1	RED EXTERNAL HANDLE IP65	-	14242111	SOCOMECC
Q1	1	EXTERNAL CONTROL AXIS 500mm	-	14001250	SOCOMECC
Q1	2	FUSERBLOC 3P 630A TERMINAL COVERS	-	39983080	SOCOMECC
T1	1	TRANSFORMER	0-400/24V 400VA	7051221X	CIRIACONO
FU1 (FUSE)	3	FUSES	500A NH3	5509500	WIMEX
FU2	1	FUSE HOLDER 3 POLE	3P 10X38 NO UR	5450104S	WIMEX
FU2 (FUSE)	3	FUSES	10X38 1A-500V	5400101	WIMEX
FU3	1	FUSE HOLDER 2 POLE	2P 10X38 NO UR	5450103S	WIMEX
FU3 (FUSE)	2	FUSES	10X38 4A-500V	5400104	WIMEX
FU4	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU4 (FUSE)	1	FUSE	10X38 16A 500V	5400116	WIMEX
FU5	1	FUSE HOLDER 1 POLE	1P 10X38 NO UR	5450101S	WIMEX
FU5 (FUSE)	1	FUSE	10X38 1A 500V	5400101	WIMEX
SC1	1	ELETTIC PUMP UNIT	CEA-SMART025	00242324	ELCOS
KM1	1	LINE CONTACTOR	AF265-30-11-11	AF265300011	ABB
KM2	1	STAR CONTACTOR	AF190-30-00-11	AF190300011	ABB
KM3	1	TRIANGLE CONTACTOR	AF265-30-11-11	AF265300011	ABB
KM2	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
KM3	1	NC CONTACT CONTACTOR	CA4-01	CA401	ABB
TA1	1	CURRENT TRANSFORMER	500/5A	TASI50C500	IME
S1	1	KEY-OPERATED 3-POS. SELECTOR EXTRACTABLE ON 1-0-2	1SFA611283R1001	70100870	ABB
S1	1	SUPPORT FIXING 3 CONTACTS	1SFA611605R1100	70100887	ABB
S1	1	NO CONTACT	1SFA611610R1001	70100886	ABB
S1	1	NC CONTACT	1SFA611610R1010	70100885	ABB
-	2	COVER FOR AF116->AF370 TERMINALS	LT370-30L	LT370-30L	ABB
X3	15	AUXILIARY TERMINAL BLOCK	CBC.2/GR	CBC02GR	CABUR
X2	6	POWER TERMINAL BLOCK	GPA.150/GR	GA200GR	CABUR
AP1	1	GREY METAL BOX	1500X800X400	LN1508040002	GROSSULE

TECHNICAL SPECIFICATIONS				
Type	Power		Standard panel dimensions	
	kW	A	L x H x P (mm)	
SNFST-15	15	31	600 x 400 x 200	Wall assembly
SNFST-18,5	18,5	38	600 x 400 x 200	Wall assembly
SNFST-22	22	50	600 x 400 x 200	Wall assembly
SNFST-30	30	62	700 x 500 x 200	Wall assembly
SNFST-37	37	75	700 x 500 x 200	Wall assembly
SNFST-45	45	100	700 x 500 x 200	Wall assembly
SNFST-55	55	124	800 x 600 x 300	Wall assembly
SNFST-75	75	135	800 x 600 x 300	Wall assembly
SNFST-90	90	155	1000 x 800 x 300	Wall assembly
SNFST-110	110	200	1300 x 800 x 300	Floor mounting
SNFST-132	132	241	1300 x 800 x 300	Floor mounting
SNFST-160	160	280	1300 x 800 x 300	Floor mounting
SNFST-200	200	350	1300 x 800 x 300	Floor mounting
SNFST-250	250	430	1500 x 800 x 400	Floor mounting

TECHNICAL SPECIFICATIONS		
Mains input		
Mains system		SINGLE-PHASE
Rated mains voltage		400 Vac $\pm$ 10 %
Mains frequency		(50 $\div$ 60) Hz
Rated insulation voltage	Terminal board at mains voltage	450 Vac
	Low voltage aux services terminal block	32 Vac
Insulation class		CLASS 1
Overvoltage category		CATEGORY 3
Max. impedance in the fault ring in the point of panel installation		2,5 Ω
Plant system to which it is connected		TN-TT-IT
Employment category		
Electric pump contactors		AC3
Digital outputs		
Terminal OUT.5 $\div$ OUT.9	Type of output	Clean contact during switc-over
	Maximum load	5 A (AC1) 250 Vac
Environmental conditions		
Operating temperature		(-5 $\div$ 40) °C
Storage temperature		(-10 $\div$ 50) °C
Relative maximum humidity		$\leq$ 50 % @ 40 °C
Max altitude		2000m s.l.m.
Degree of protection		
Degree of protection		IP55
Installation conditions		WALL MOUNTED FOR INTERNAL USE
Weight		
SNFST-15		18 kg
SNFST-18,5		18 kg
SNFST-22		18 kg
SNFST-30		22 kg
SNFST-37		36 kg
SNFST-45		36 kg
SNFST-55		46 kg
SNFST-75		46 kg
SNFST-90		49 kg
SNFST-110		100 kg
SNFST-132		100 kg
SNFST-160		100 kg
SNFST-200		100 kg
SNFST-250		120 kg

MAINS CONNECTIONS

- The panel connection must be made with the MAINS DISENGAGED, according to wiring diagram provided in this manual.
- You must connect the panel to the existing earth system in compliance with the laws in force.
- The panel is suitable for being installed at a point with prospective short circuit current $I_{cp} < 10\text{kA}$.
- Alternatively, it can be installed at a point with conditional short circuit current $I_{cc} < 17\text{kA}$.

BEFORE SUPPLYING VOLTAGE:

- make sure that the live parts are inaccessible.
- check the earth connection.

WARNING! THIS ELECTRICAL PANEL IS NOT SUITABLE FOR USE WHERE THE FOLLOWING CONDITIONS ARE PRESENT:

- inside installations where the current throughput or interruption power could be influenced by certain conditions (e.g equipment incorporated in machinery).

NOTICES

Its sole function is to monitor and control an fire fighting electric pump unit. It is made to be wall mounted indoor.

WARNING: PARTS CARRYING DANGEROUS VOLTAGE.

Strictly comply with the following advice.

- Any intervention on the electric pump must take place with the motor stopped.
- Pay attention to connection the main conductors.
- Check that the absorption and consumption of the connected equipment are compatible with the described technical characteristics.
- Install in such a way that there is always adequate heat disposal.
- Always install the device at a lower position than any other devices that produce or dissipate heat.
- The equipment must be earthed via the relevant terminal.
- Handle and connect the unit without mechanically stressing the electronic board.
- Make sure that copper conductor cuttings or other waste material do not fall inside the panel.
- If necessary, the fuses must only be replaced with the same type as the original.

: WARNING! THIS ELECTRICAL PANEL IS NOT SUITABLE FOR USE WHERE THE FOLLOWING CONDITIONS ARE PRESENT

- Temperatures, relative humidity values and altitudes which differ from those specified;
- in places where the temperature and pressure variations are so rapid that they produce exceptional condensation inside the panel;
- in places where there are high levels of pollution due to dust, fumes, corrosive or radioactive particles, vapours and salts;
- where there is exposure to high temperature due to solar radiation or furnaces;
- where attacks from mould or small animals are possible;
- in places where there is the risk of fires or explosions;
- subjection to strong vibrations or knocks;.

ELECTROMAGNETIC COMPATIBILITY

This panel functions correctly only if inserted in plants which conform with the CE marking standards; it meets the exemption requirements of the standard EN61326-1 but it cannot be excluded that malfunctions could occur in extreme cases due to particular situations. The installer has the task of checking that the disturbance levels are within the requirements of the standards.

RUNNING AND MAINTENANCE



WARNING: PARTS CARRYING DANGEROUS VOLTAGE

The following maintenance operations should be performed each week:

- automatic start with switching;
- check that indicators function;

It is advisable to perform the following voltage-free operations:

- check that conductors are tight and condition of terminals;
- visual inspection of the equipment;
- visual inspection of the connections and identification marks;

The opening of the panel for whatever reason implies the performance of work in the "vicinity zone" under the standard EN 50110-1, and therefore must only be performed by electrically "instructed" or "skilled" personnel and in compliance with the procedures under the standard itself.

NOTE ON CONNECTING THE CONTROL AND SAFETY DEVICES TO THE PANEL

If you connect motor protection probes, remote control or command contacts directly to the panel, certain malfunctions (e.g. earth malfunctions or electrical connection blackout) may prevent start-up or cause an untimely start-up.

To reduce such risks, the installer may take responsibility and follow the measures described in sections 9.4.2.1 and 9.4.2.2 of the standard CEI EN60204-1 (CEI 44-5), if he considers it opportune.

Any use which differs from that what is indicated in this instruction and user manual must be authorized by us..

DATA FOR ORDERING

Type	Code
SNFST-15	00023048
SNFST-18,5	00023049
SNFST-22	00023050
SNFST-30	00023051
SNFST-37	00023052
SNFST-45	00023053
SNFST-55	00023054
SNFST-75	00023055
SNFST-90	00023056
SNFST-110	00023057
SNFST-132	00023058
SNFST-160	00023059
SNFST-200	00023060
SNFST-250	00023061

STANDARD ACCESSORIES

Type
Mount brackets Kit

Алматы (7273)495-231	Иваново (4932)77-34-06	Магнитогорск (3519)55-03-13	Пермь (342)205-81-47	Тверь (4822)63-31-35
Ангарск (3955)60-70-56	Ижевск (3412)26-03-58	Москва (495)268-04-70	Ростов-на-Дону (863)308-18-15	Тольятти (8482)63-91-07
Архангельск (8182)63-90-72	Иркутск (395)279-98-46	Мурманск (8152)59-64-93	Рязань (4912)46-61-64	Томск (3822)98-41-53
Астрахань (8512)99-46-04	Казань (843)206-01-48	Набережные Челны (8552)20-53-41	Самара (846)206-03-16	Тула (4872)33-79-87
Барнаул (3852)73-04-60	Калининград (4012)72-03-81	Нижний Новгород (831)429-08-12	Саранск (8342)22-96-24	Тюмень (3452)66-21-18
Белгород (4722)40-23-64	Калуга (4842)92-23-67	Новокузнецк (3843)20-46-81	Санкт-Петербург (812)309-46-40	Ульяновск (8422)24-23-59
Благовещенск (4162)22-76-07	Кемерово (3842)65-04-62	Ноябрьск (3496)41-32-12	Саратов (845)249-38-78	Улан-Удэ (3012)59-97-51
Брянск (4832)59-03-52	Киров (8332)68-02-04	Новосибирск (383)227-86-73	Севастополь (8692)22-31-93	Уфа (347)229-48-12
Владивосток (423)249-28-31	Коломна (4966)23-41-49	Омск (3812)21-46-40	Симферополь (3652)67-13-56	Хабаровск (4212)92-98-04
Владикавказ (8672)28-90-48	Кострома (4942)77-07-48	Орел (4862)44-53-42	Смоленск (4812)29-41-54	Чебоксары (8352)28-53-07
Владимир (4922)49-43-18	Краснодар (861)203-40-90	Оренбург (3532)37-68-04	Сочи (862)225-72-31	Челябинск (351)202-03-61
Волгоград (844)278-03-48	Красноярск (391)204-63-61	Пенза (8412)22-31-16	Ставрополь (8652)20-65-13	Череповец (8202)49-02-64
Вологда (8172)26-41-59	Курск (4712)77-13-04	Петрозаводск (8142)55-98-37	Сургут (3462)77-98-35	Чита (3022)38-34-83
Воронеж (473)204-51-73	Курган (3522)50-90-47	Псков (8112)59-10-37	Сыктывкар (8212)25-95-17	Якутск (4112)23-90-97
Екатеринбург (343)384-55-89	Липецк (4742)52-20-81		Тамбов (4752)50-40-97	Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-24-47