



[TAG[MainCharacteristics]]

Гама на продукта	Altistart 22
Product or component type	Софт старт
Предназначение на продуктите	Асинхронен мотор
Специфично приложение на продукта	#N/A
Наименование на компонента	ATS22
Мрежов брой фази	3 фази
[Us] номинално захранващо напрежение	230...440 V - 15...10 %
Моторна мощност в kW	15 kW 400 V 7.5 kW 230 V 15 kW 440 V
Factory setting current	28.5 A
Енергийно разсейване в W	44 W for standard applications
Категория за оползотворяване	AC-53A
Тип стартиране	Start with torque control (current limited to 3.5 In)
IcL starter rating	32 A connection in the motor supply line for standard applications
Степен на защита IP	IP20

[TAG[ComplemCharacteristics]]

Начин на сглобяване	С радиатор
Налична функция	Internal bypass
Лимит на захранващо напрежение	195...484 V
Честота на захранването	50...60 Hz - 10...10 %
Честотна мрежа	45...66 Hz
Свързване на устройството	In the motor supply line To the motor delta terminals
[Uc] Управляващо напрежение	230 V -15...10 % 50/60 Hz
Control circuit consumption	20 W
Дискретен номер на изход	2
Вид дискретен изход	Изходи на реле R1 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O Изходи на реле R2 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O
Минимален ток за превключване	100 mA 12 V DC Изходи на реле
Максимален превключвателен ток	5 A 250 V AC Съпротивителни 1 Изходи на реле 5 A 30 V DC Съпротивителни 1 Изходи на реле 2 A 250 V AC Индуктивен 0.4 20 ms Изходи на реле 2 A 30 V DC Индуктивен 7 ms Изходи на реле
Дискретен номер на вход	3
Вид дискретен вход	Логика LI1, LI2, LI3 5 mA 4.3 kOhm
Дискретно входно напрежение	24 V <= 30 V
Цифров вход	Positive logic LI1, LI2, LI3 < 5 V and <= 2 mA > 11 V >= 5 mA
Output current	0.4...1 Icl Регулируем
PTC probe input	750 Ohm
Протокол на комуникационния порт	Modbus
Тип конектор	1 RJ45
Communication data link	Serial
Физически интерфейс	RS485 multidrop

Скорост на предаване	4800, 9600 or 19200 bps
Installed device	31
Тип защита	Термална защита Мотор Phase failure line Термална защита стартер
Маркировка	CE
Тип охлаждане	Forced convection
Работно положение	Вертикална +/- 10 градуса
Височина	265 mm
Широчина	130 mm
Дълбочина	169 mm
Тегло на продукта	7 kg
Ниво на мощност	7...11 kW при 200...240 V 3 фази 15...25 kW при 380...440 V 3 фази
Motor starter type	Софт старт

## [TAG[EnvCharacteristics]]

Електромагнитна съвместимост	Разпръсквани емисии level A IEC 60947-4-2 Изместени синусоиди Ниво 3 IEC 61000-4-12 Електростатичен разряд Ниво 3 IEC 61000-4-2 Устойчивост на електрически смущения Ниво 4 IEC 61000-4-4 Устойчивост на ради - електрически смущения Ниво 3 IEC 61000-4-3 Напрежение/ток импулс Ниво 3 IEC 61000-4-5
Стандарти	EN/IEC 60947-4-2
Продуктови сертификати	CCC CSA C-Tick GOST UL
Устойчивост на вибрации	1 gn 13...200 Hz EN/IEC 60068-2-6 1.5 mm 2...13 Hz EN/IEC 60068-2-6
Устойчивост на удар	15 gn 11 ms EN/IEC 60068-2-27
Ниво на шум	45 dB
Ниво на замърсяване	Ниво 2 IEC 60664-1
Относителна влажност	0...95 % Без конденз или капеща вода EN/IEC 60068-2-3
Температура на околния въздух при работа	-10...40 °C Без отклонение > 40...< 60 °C с токов спад 2.2 % при °C
Температура на околния въздух за складиране	-25...70 °C
Допустима надморска височина	<= 1000 m Без отклонение > 1000...< 2000 m С токов пад 2.2 % при допълнителни 100 m

## Устойчивост на офертата

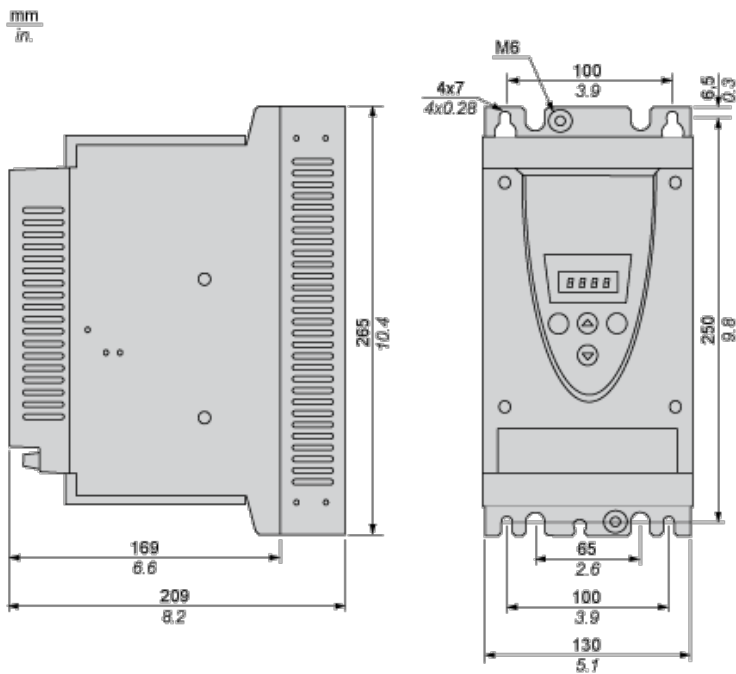
Статус на офертата за устойчиво развитие	Продукт Green Premium
RoHS (дата: YYWW)	Compliant - since 0938 - Schneider Electric declaration of conformity
REACH	Референцията не съдържа SVHC над прага
Екологичен профил на продукта	Наличен
Инструкции за край на експлоатационния живот на продукта	Наличен

## Contractual warranty

Период	18 months
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## Frame Size A

### Dimensions



## Precautions

### Standards

The Altistart 22 soft starter is compliant with pollution Degree 2 as defined in NEMA ICS1-1 or IEC 60664-1. For environment pollution degree 3, install the Altistart 22 soft starter inside a cabinet type 12 or IP54.

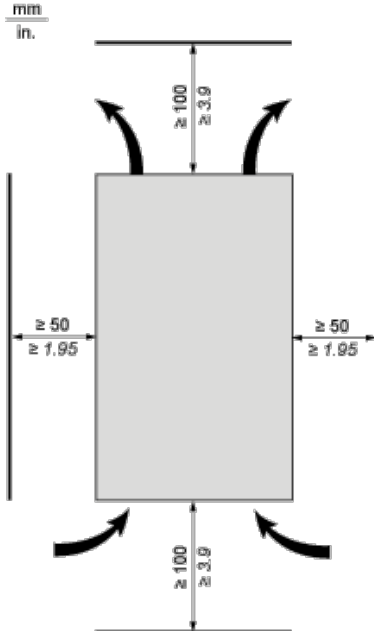
### ⚠ DANGER

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

ATS22 soft starters are open devices and must be mounted in a suitable enclosure. Failure to follow these instructions will result in death or serious injury.

### Air Circulation

Leave sufficient free space to help the air required for cooling purposes to circulate from the bottom to the top of the unit.



### Overheating

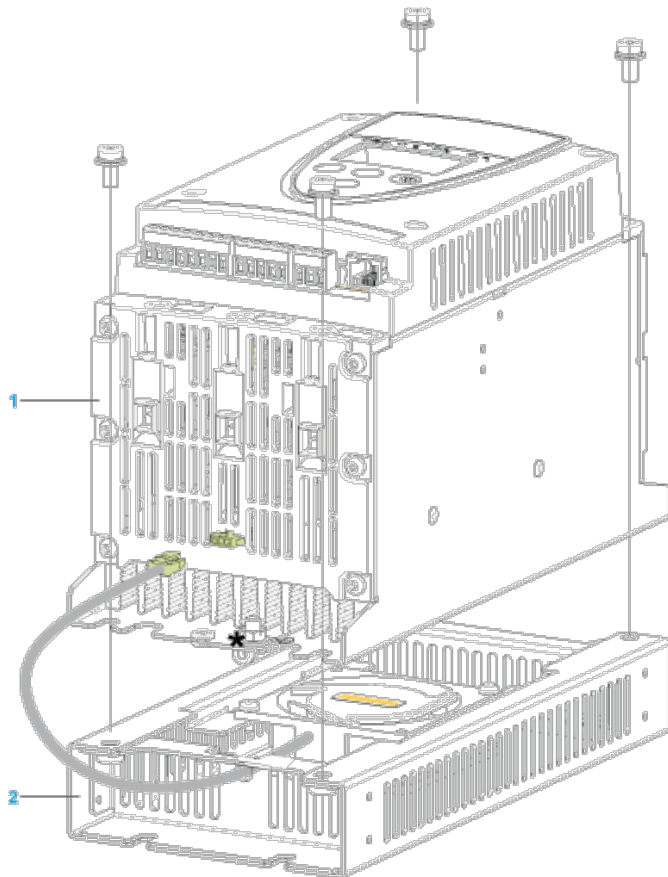
To avoid the soft starter to overheat, respect the following recommendations:

- 1 Mount the Altistart 22 Soft Starter within  $\pm 10^\circ$  of vertical.
- 1 Do not locate the Altistart 22 Soft Starter near heat radiating elements.
- 1 Electrical current through the Altistart 22 Soft Starter will result in heat losses that must be dissipated into the ambient air immediately surrounding the soft starter. To help prevent a thermal fault, provide sufficient enclosure cooling and/or ventilation to limit the ambient temperature around the soft starter.

- 1 If several soft starters are installed in a control panel, arrange them in a row. Do not stack soft starters. Heat generated from the bottom soft starter can adversely affect the ambient temperature around the top soft starter.

## Mounting

### Connection Between the Fan and the Altistart 22 Soft Starter



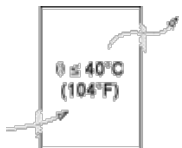
- 1 Altistart 22 Soft Starter
- 2 Fan

## Wall mounted or Floor-standing Enclosure with IP 23 Degree of protection

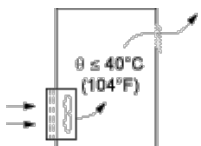
### Introduction

To help proper air circulation in the soft starter, grilles and forced ventilation can be installed.

### Ventilation Grilles

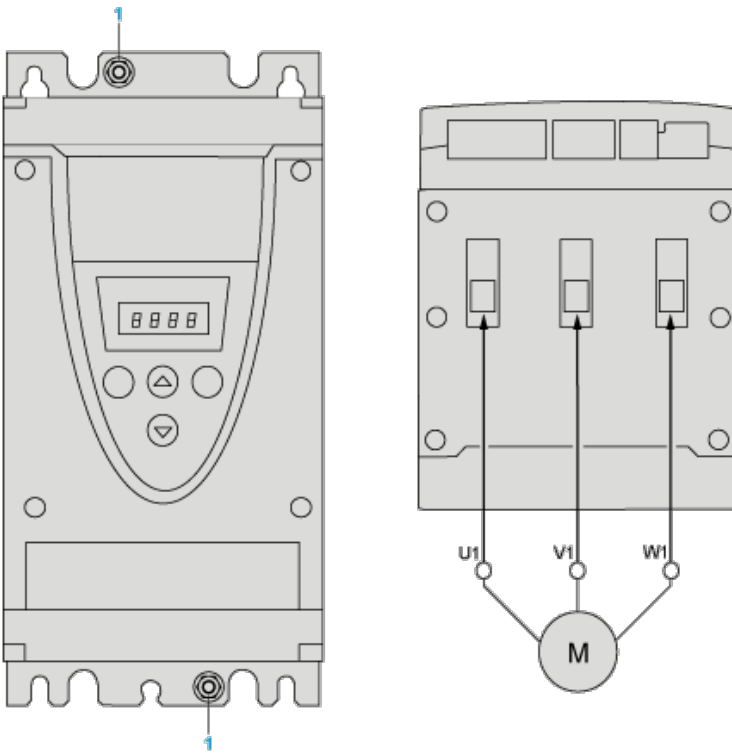


### Forced Ventilation Unit



## Power Terminal

### Cage Style



1 Ground connection

**Power connections, minimum and maximum wiring capabilities, tightening torque**

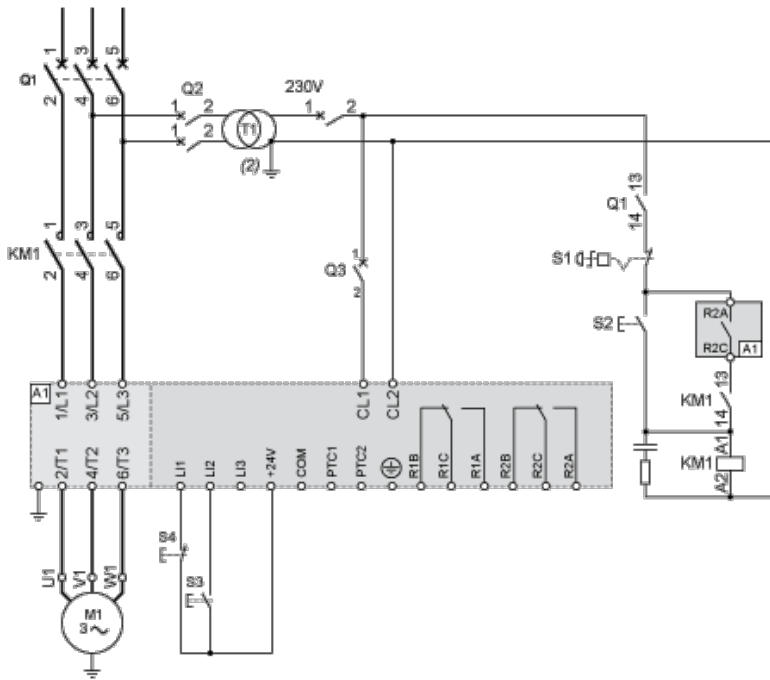
		IEC cable		UL cable
Power supply and output to motor	Size/gauge	min	2.5 mm	12 AWG
		max	16 mm	4 AWG
	Tightening torque	min	3 N.m	26.25 lb.in
		max	3 N.m	26.25 lb.in
	Strip length		10 mm	0.4 in.

**Power connections, minimum required wiring section**

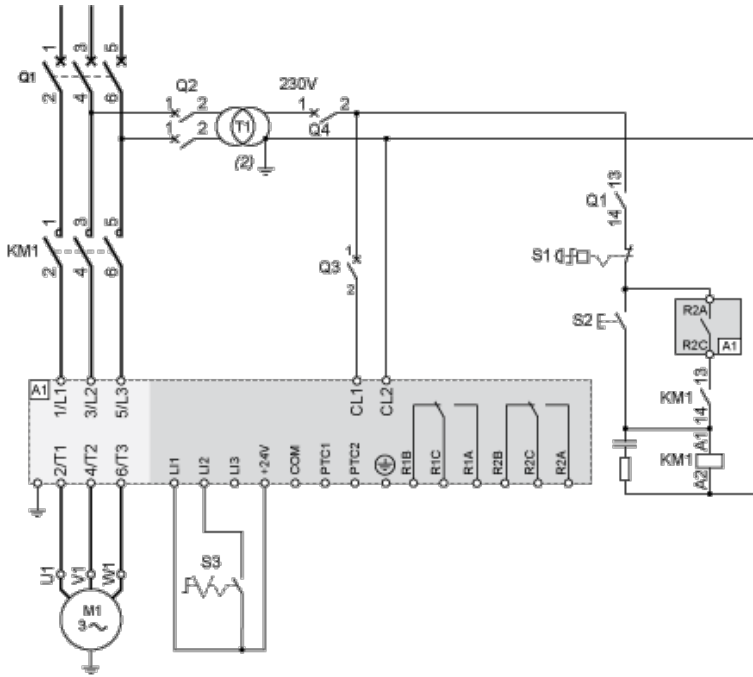
IEC cable mm <sup>2</sup> (Cu 70°C/158°F) (1)	UL cable AWG (Cu 75°C/167°F) (1)
6	8

**230 Vac control, logic Inputs (LI) 24 Vdc, 3-wire control**

With Line Contactor, Freewheel or Controlled Stop



230 Vac control, logic Inputs (LI) 24 Vdc, 2-wire control, freewheel stop

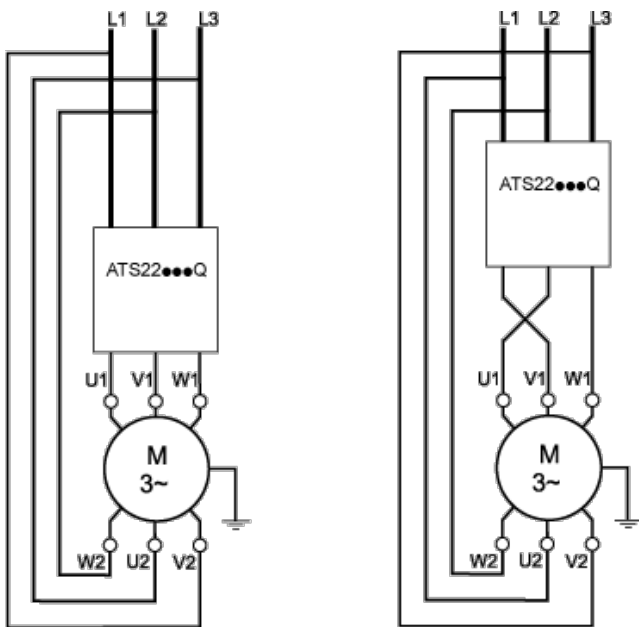


### Connection in the motor delta winding in series with each winding

#### Wiring

ATS22 soft starters connected to motors with the delta connections can be inserted in series in the motor windings.

The following wiring requires particular attention. It is documented in the Altistart 22 Soft start - soft stop unit user manual. Please contact Schneider Electric commercial organisation for further informations.

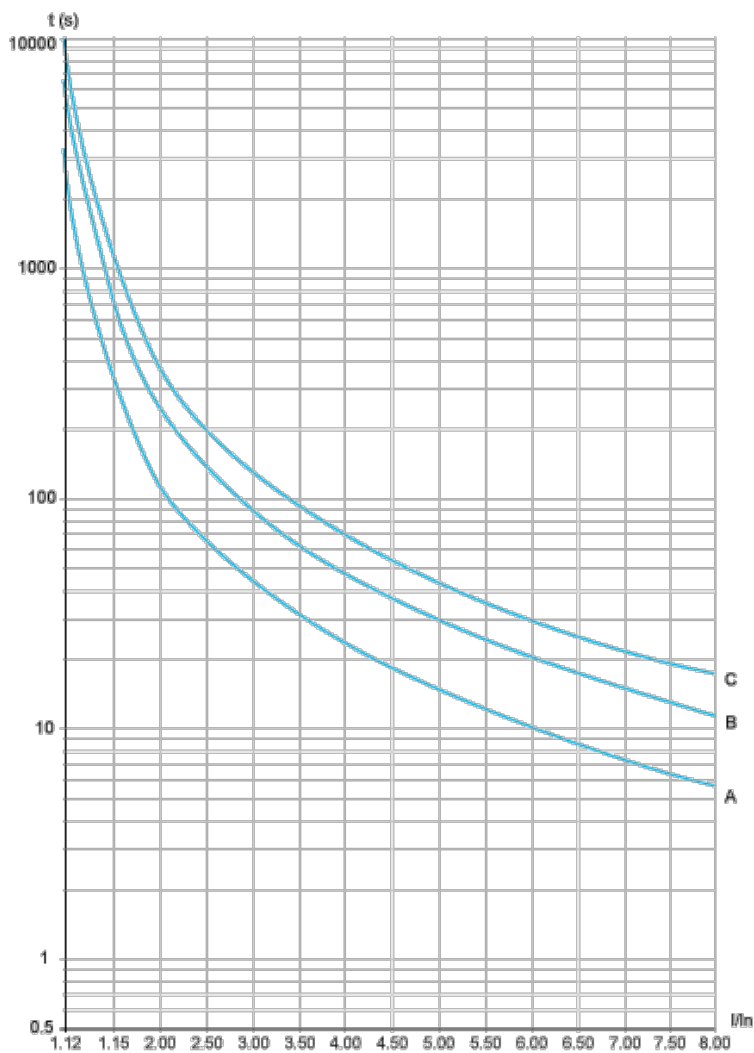


### Example

A 400 V - 110 kW motor with a line current of 195 A (nominal current for the delta connection). The current in each winding is equal to  $195/1.5$  or 130 A. The rating is determined by selecting the soft starter with a permanent nominal current (ICL) just above this current.

## Motor Thermal Protection - Cold Curves

### Curves



- A Class 10
- B Class 20
- C Class 30

### Trip time for a Standard Application (Class 10)

3.5 In

32 s

### Trip time for a Severe Application (Class 20)

3.5 In

63 s

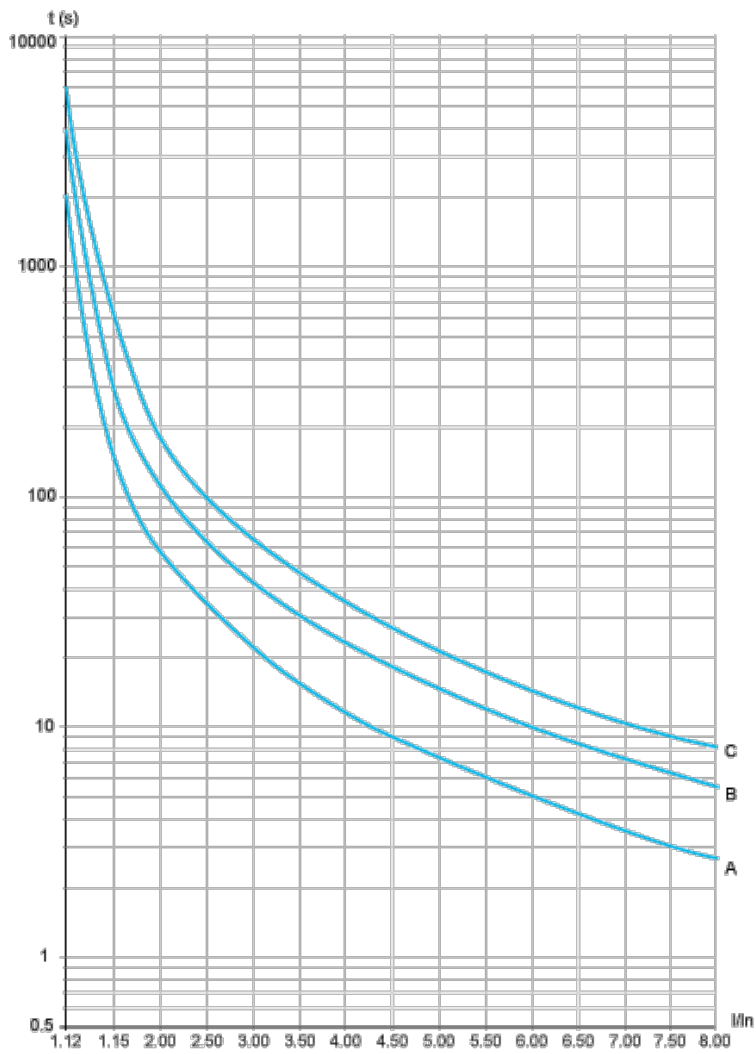
### Trip time for a Severe Application (Class 30)

3.5 In

95 s

## Motor Thermal Protection - Warm Curves

### Curves



A Class 10

B Class 20

C Class 30

### Trip time for a Standard Application (Class 10)

3.5 In

16 s

### Trip time for a Severe Application (Class 20)






3.5 In
32 s

**Trip time for a Severe Application (Class 30)**

3.5 In
48 s

**Our Proposal: Circuit Breaker + Contactor + Soft Starter for Motor Power 15 kW and 400 VAC**

Motor Power (kW)	Icu (kA)	Breaker	Contactor (*)	Motor Starter
15	50	 GV3L32	 LC1D32P7	 ATS22D32Q

Non contractual pictures.

(\*) You can select the contactor proposed or variants. Please consider examples hereafter or follow the link to the complete offer.

Motor Power kW	Coil voltage VAC - 50/60 Hz	24	48	110	115	220	230	400	Other
15	LC1D32 ..	B7	E7	F7	FE7	M7	P7	V7	Complete Offer

Motor Power kW	Coil voltage VDC - U 0.75...1.25 Uc	24	48	Other
15	LC1D32 ..	BD	ED	Complete Offer

Motor Power kW	Coil voltage Low Consumption VDC - U 0.8...1.25 Uc	24	110	Other
15	LC1D32 ..	BL	FL	Complete Offer