



# Altivar Soft Starter ATS130, 45A, 200 to 480V AC, control supply 24V DC

ATS130N2D45LT

## Main

Range of product	Altivar Soft Starter ATS130	
Product or component type	Soft starter	
Product destination	Asynchronous motors	
Product specific application	Simple machine	
Device short name	ATS130	
Network number of phases	3 phases	
Utilisation category	AC-53A	
Ue power supply voltage	200480 V - 1510 %	
power supply frequency	5060 Hz +/- 5 Hz	
[le] rated operational current	45 A in line (at <40 °C)	
Service factor at le	100	
Torque control	False	
IP degree of protection	IP20	
Motor power kW	11 kW at 230 V normal duty 22 kW at 400 V normal duty 22 kW at 440 V normal duty	
Motor power hp	10 hp at 200 V normal duty 10 hp at 208 V normal duty 15 hp at 230 V normal duty 30 hp at 460 V normal duty 30 hp at 480 V normal duty	

# Complementary

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Overload current profile	300 % le for 5 s	
On-load factor	70 %	
Operating cycles/hour	35 cyc/h	
Minimum motor current	20 % le	
Device connection	In line	
[Us] control circuit voltage	24 V DC +/- 10 %	
Control power	21.6 W starting and stopping 3 W steady state	
Integrated motor overload protection	False	
Protection type	Phase failure: mains Thermal protection: starter Bypass error: starter Control voltage Us: starter	

Rated current pwr loss	45 A	
specification Power loss static current	3 W	
independent	3 VV	
Power loss per device current dependent	9 W	
Power loss during starting	264 W 300 % le	
Standards	EN/IEC 60947-4-2 UL 60947-4-2 IEC 60664-1	
product certifications	CE UKCA CCC RCM EAC	
marking	CE CCC UKCA RCM EAC	
[Uc] control circuit voltage	24 V DC	
Discrete input number	3	
Discrete input type	(DI) digital input, 10 kOhm (DI2) digital input, 10 kOhm (BOOST) digital input, 10 kOhm	
Input compatibility	Discrete input level 1 PLC conforming to EN/IEC 61131-2	
Discrete input logic	Digital input at State 0: 0< 5 V and <= 0.2 mA at State 1: > 13 V, >= 0.5 mA	
Relay output number	1	
Relay output type Relay outputs R1A, R1C NO		
Minimum switching current	2.5 mA at 24 V DC for relay outputs	
Maximum switching current	On resistive load for relay outputs: 1 A 250 V AC 400000 cycles  On resistive load for relay outputs: 1 A 30 V DC 400000 cycles  On inductive load for relay outputs: 1 A 250 V AC cos phi = 0.4 100000 cycles  On inductive load for relay outputs: 1 A 30 V DC cos phi = 0.4 100000 cycles	
Discrete output number	1	
Discrete output type	Non programmable digital output DQ1 <= 30 V 200 mA	
Display type	LED (green) for control power energized     LED (yellow and red) for motor operation phases, errors	
Display screen available	False	
Operating position	Vertical +/- 30 degree	
Height	166 mm	
Width	55 mm	
Depth	165 mm	
Net weight	1.3 kg	
Suitable for mounting onto standard rails	True	
Function available	Deceleration voltage ramp Boost	
internal bypass	True	
material declaration	True	

#### **Environment**

Pollution degree Level 2

environmental class (during operation)	Without salt mist: 3C3 conforming to IEC 60721-3-3 3S3 conforming to IEC 60721-3-3	
[Uimp] rated impulse withstand voltage	4 kV	
[Ui] rated insulation voltage	480 V	
Electromagnetic compatibility	Conducted and radiated emissions level B conforming to IEC 60947-4-2 Short voltage interruptions level 3 conforming to IEC 61000-4-11 Electrostatic discharge level 2 conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test level 1 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 2 conforming to IEC 61000-4-4 Oscillatory waves immunity level 3 conforming to IEC 61000-4-12 Voltage/current impulse level 2 conforming to IEC 61000-4-5 Conducted disturbances, induced by radiofrequency fields level 1 conforming to IEC 61000-4-6	
Ambient air temperature for operation	-1040 °C (without derating) 4060 °C (with current derating 1.5 % per °C)	
Ambient air temperature for storage	-2570 °C	
Ambient air transport temperature	-4070 °C	
Operating altitude	01000 m without derating 10004000 m 1 % per 100 m	
Relative humidity	595 % non condensing without dripping water conforming to IEC 60068-2-3	
Maximum acceleration under vibrational stress (during operation)	10 m/s² at 9200 Hz	
Maximum acceleration under vibratory load (during storage)	10 m/s² at 9200 Hz	
Maximum acceleration under vibratory load (during transport)	10 m/s² at 9200 Hz	
Maximum deflection under vibratory load (during operation)	3 mm at 2-9 Hz	
Maximum deflection under vibratory load (during storage)	3 mm at 2-9 Hz	
Maximum deflection under vibratory load (during transport)	3 mm at 2-9 Hz	
Maximum acceleration under shock impact (during operation)	100 m/s² at 11 ms	
Maximum acceleration under shock load (during storage)	100 m/s² at 11 ms	
Maximum acceleration under shock load (during transport)	100 m/s² at 11 ms	
Packing Units		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	6.300 cm	
Package 1 Width	27.000 cm	
Package 1 Length	28.000 cm	
Package 1 Weight	1.515 kg	
Unit Type of Package 2	S06	
Number of Units in Package 2	40	
Package 2 Height	75.000 cm	
Package 2 Width	60.000 cm	
Package 2 Length	80.000 cm	

70.000 kg

Package 2 Weight



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Transparency RoHS/REACh

## Well-being performance

<b>⊘</b>	Reach Free Of Svhc	
<b>9</b>	Toxic Heavy Metal Free	
<b>②</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

# **Certifications & Standards**

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
Circularity Profile	End of Life Information	

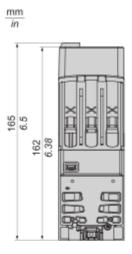
16-Sept-2024

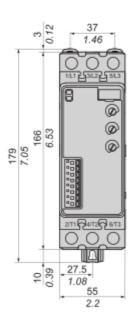
# ATS130N2D45LT

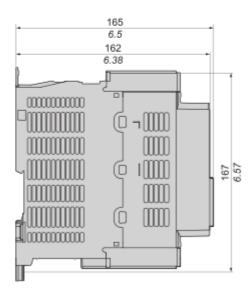
#### **Dimensions Drawings**

# Dimensions

#### **Soft Starter**

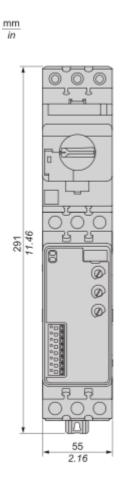


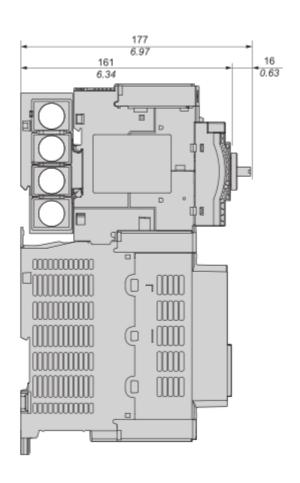




#### **Dimensions**

#### **Soft Motor Starter**

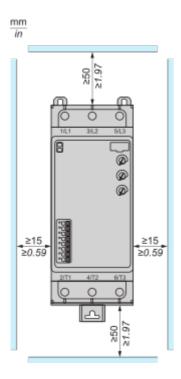




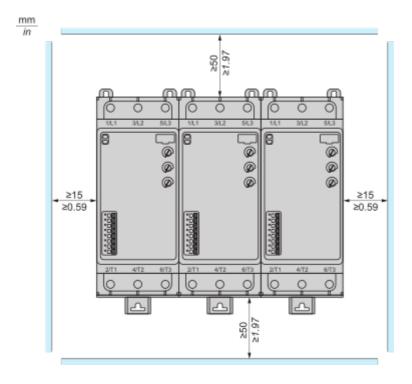
Mounting and Clearance

Mounting

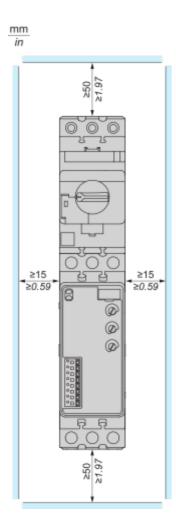
#### ATS130 Standalone



#### ATS130 Side by side



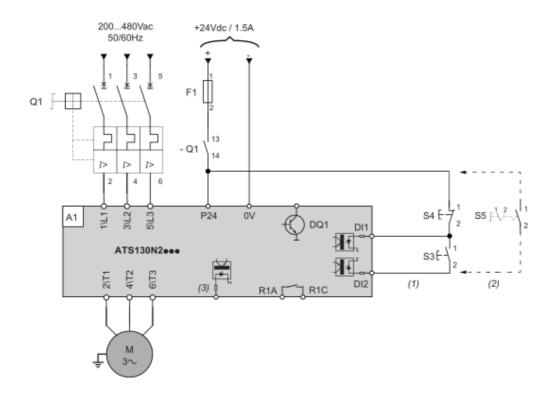
ATS130 Soft Motor Starter (ATS130 + TeSys Deca circuit breaker)



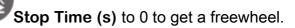
### ATS130N2D45LT

#### Connections and Schema

#### Wiring



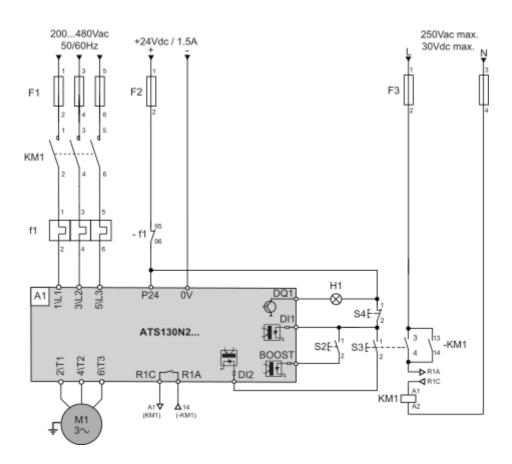
# NOTE: Set the potentiometer



(1): 3-Wire control(2): 2-Wire control(3): BOOST

<b>Designation Component</b>		Description
Q1	Circuit breaker	Thermal-magnetic motor circuit breaker
– Q1	Auxiliary contact of the circuit breaker Q1	Normally open auxiliary contact
F1	Fuse	Short circuit protection of the 24Vdc control supply
S3	Normally open push-button	RUN order
S4	Normally closed push-button	STOP order and freewheel or controlled stop
<b>S</b> 5	Selector switch, 2 positions, normally open contact RUN/STOP command for 2-wire control	

## Wiring



# NOTE: Set the potentiometer

# Stop Time (s) to 0 to get a freewheel.

Designation	Component	Description
F1	Fuses	Short circuit protection device for the mains
KM1	Contactor	Line contactor
-KM1	Auxiliary contact of the contactor	Auxiliary contact of the contactor on the command part
f1	Motor overload relay	Thermal protection device for the motor
- f1	Auxiliary contact of the motor overload relay	Auxiliary contact of the motor overload relay F1 inserted in the control circuit
F2	Fuse	Short circuit protection of the 24Vdc control supply
F3	Fuses	Short circuit protection of the control supply
S2	Normally open contact push-button.	RUN command for BOOST command
S3	Normally open contact push-button.	RUN command for 3-wire control

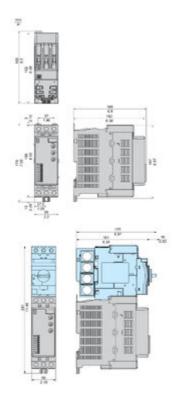
# **Product datasheet**

# ATS130N2D45LT

Designation	Component	Description
S4	Normally closed contact push- button	STOP command for 3-wire control
H1	Light	Presence of current

# **Technical Illustration**

## **Dimensions**



Offer Marketing Illustration

#### Product benefits / Features

# **Technical Benefits**

Altivar Soft Starter ATS130



Offer Marketing Illustration

#### **Product benefits / Features**



Image of product / Alternate images

**Alternative** 







