

## **TECHNICAL SPECIFICATION**

# "Star/delta" starter



# **Description:**

The electromagnetic starters LT 3 Dxx series are devices designed for remote control, direct control and protection of induction motors coiled and operating according to a starter scheme "star/delta". They are a combination of three contactors LT 1 Dxx series, time relay and a set of buttons "start" and "stop" factory cabled. They provide the easy motor unwinding giving possibility for setting the time for unwinding in "star" as the time for switching between "star" and "delta" is fixed to 0.5 seconds. The starters are offered on the market in two types:

- closed type metal boxes providing the corresponding IP code from dust and moisture (IP 54) as at mounting there should be provided protection of the device from short circuit through breakers or disconnectors
- open type for mounting in distribution boxes as at mounting there should be provided protection of the device from short circuit through breakers or disconnectors

The starters are offered on the market without mounted thermal protection which is purchased separately according to the motor capacity. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation. If necessary, at client's order the power supply operating voltage of the pneumatic starter can be changed.

#### **Functions:**

- switching on/off alternating current three phase motors operating according to a scheme "star - delta"
- does not allow secondary unwarranted switching on of the starter at transitory lowering of the voltage
- protects the motor from overload in the range of the corresponding thermal protection
- indication of the operating condition through a valve indicator
- possibility for mounting of additional contacts (for the open type)
- remarkable with high reliability of current characteristics

#### **Technical data:**

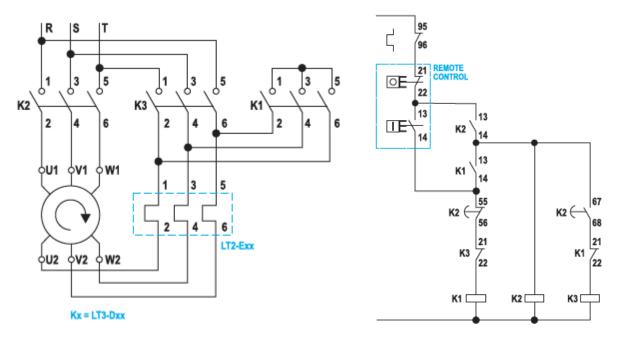
Rated voltage of the controlling voltage: 400V AC; 50/60 Hz

**Note:** In case you need different controlling coils voltage of the starters you can turn to our regional representatives

- Rated operating voltage: 690V
- Rated operating current range: from 7 to 93A AC
- Insulation voltage: >690V
- Surge voltage wear resistance:≥6000V
- Joining terminal: screw terminal
- Little power consumption and small dimensions
- Connecting:
  - flexible or rigid conductors with or without cable terminal for joining to the consumer and section according to the motor power
  - three by three inlets/outlets supplied with orifices for the cables
- Possibility for operation at higher frequency

- IP code: IP54
- Mounting:
  - mounting to a flat surface (wall) with bolts/ screws
  - mounting position: vertical gradient maximum± 5°
- Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- The metal body is covered with corrosion-proof paint
- Ambient temperature: -10°C + 65°C
- Altitude: up to 2000m

### **Schemes:**



### **Dimensions and variants:**

• Without a box



Type designation (without a box)	height	width	depth	
LT3-D25A	135	170	160	
LT3-D32A	135	170	160	
LT3-D40A	150	285	190	
LT3-D65A	150	285	190	
LT3-D95A	150	310	190	

Type designation	Rated capacity ( kW)				Rated	Coil voltage	Packing / Box	Catalogue number
(without a box)	220V 230V	380V 400V	415V	440V	(A)	(V AC)	(pcs)	
LT3-D25A	11	15	15	15	25	400	1/6	43253
LT3-D32A	15	18.5	18.5	18.5	32	400	1/6	43323
LT3-D40A	18.5	22	22	22	40	400	1/4	43403
LT3-D65A	30	55	55	55	65	400	1/4	43653
LT3-D95A	37	75	75	75	95	400	1/4	43953

**Note:** It is necessary that thermal protection with suitable range is mounted to protect the controlled motor. The shown values of magnetic starters are for normal regimes for motor control, for hard operation regimes are chosen starters which correspond to the current rating of the motor.

## With box



Type designation (without a box)	height	width	depth
LT 3 – B - D25A	370	240	160
LT 3 – B - D32A	370	240	160
LT 3 – B - D40A	470	265	160
LT 3 – B - D65A	470	265	160
LT 3 – B - D95A	470	265	160

Type designation	Rated capacity ( kW)				Rated	Coil voltage	Packing / Box	Catalogue number
(without a box)	220V 230V	380V 400V	415V	440V	(A)	(V AC)	(pcs)	
LT 3 – B - D25A	11	15	15	15	25	400	1/4	43254
LT 3 – B - D32A	15	18.5	18.5	18.5	32	400	1/4	43255
LT 3 – B - D40A	18.5	22	22	22	40	400	1/2	43256
LT 3 – B - D65A	30	55	55	55	65	400	1/4	43257
LT 3 – B - D95A	37	75	75	75	95	400	1/2	43258

**Note:** It is necessary that thermal protection with suitable range is mounted to protect the controlled motor. The shown values of magnetic starters are for normal regimes for motor control, for hard operation regimes are chosen starters which correspond to the current rating of the motor.

## **Standards:**

Standard EN 60947-1;

EN 60947-4-1

