

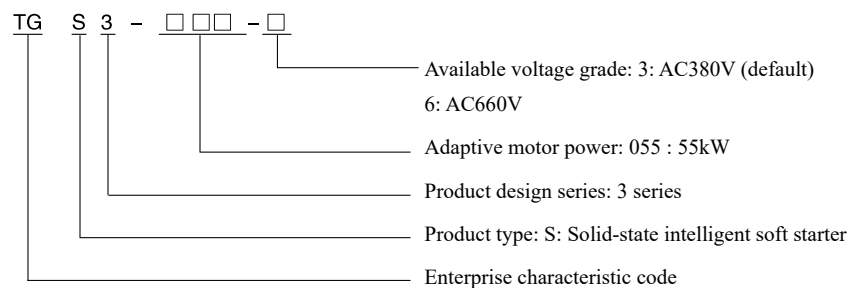
TGS3 Series Soft Starter



1 Overview

With the advanced CPU control technology as core, TGS3 series soft starter can realize the soft startup and soft stop of (squirrel cage) 3-phase AC asynchronous motor by controlling the SCR module and has multiple optional protection functions such as overload, input phase loss, output phase loss, load short circuit, starting current-limit overtime, overvoltage, and undervoltage protections. This product is mainly used together with a complete set of control cabinet. To ensure normal operation, a bypass AC contactor of the corresponding specification must be provided. The product specification covers 11kW~400kW (squirrel cage) 3-phase AC asynchronous motor that is an electrical drive equipment widely used in many industrial fields such as metallurgy, petroleum, fire control, mines, and petrochemical. This product is the most ideal replacement product for traditional star-delta start and self-coupling reduced-voltage start.

2 Type Designation



3 Technical parameters and performance

- Power voltage: Mains, captive power plant, diesel generator set: three-phase AC 380V± 15%, 50Hz; the power capacity should meet the starting requirements of soft starter for motor.
- Starting current limit: 0.5~5 times starting current limit
- Slope descent time: 0s~60s.
- Soft start reference voltage: 30%Ue~80%Ue.
- Jump start time: 0.1s.
- Environmental requirements

If the altitude exceeds 1000 meters, the capacity should be reduced accordingly, and if above 1000 meters, the current will be reduced by 0.5% for each 100 m increase;

The ambient temperature is ranged -10 °C ~ 40 °C; Relative humidity does not exceed 95%;

Installed in the well-ventilated indoor environment where there is no condensation, no flammable and explosive gases, and no conductive dust.

4 Outline and Installation Dimensions

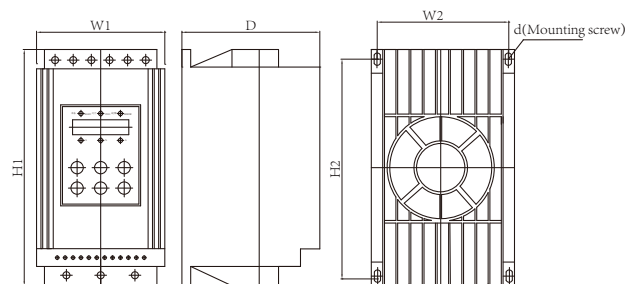


Fig. 1

TGS3 Series Soft Starter

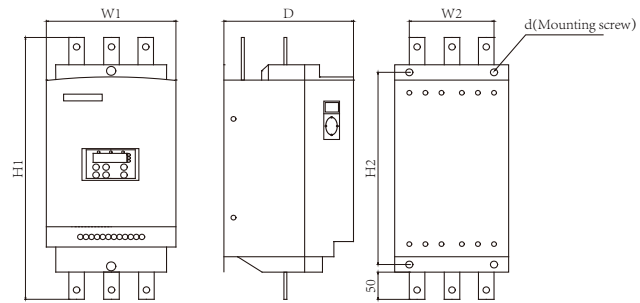


Fig. 2

Spec. & Model	Rated power (kW)	Rated current (A)	Outline and installation dimensions (mm)						Approx. weight (kg)	Outline drawing
			W1	H1	D	W2	H2	Mounting hole d		
TGS3-011-3	11	23	146	270	165	132	246	M6	<4	Fig. 1
TGS3-015-3	15	30	146	270	165	132	246	M6	<4	Fig. 1
TGS3-18.5-3	18.5	37	146	270	165	132	246	M6	<4	Fig. 1
TGS3-022-3	22	43	146	270	165	132	246	M6	<4	Fig. 1
TGS3-030-3	30	60	146	270	165	132	246	M6	<4	Fig. 1
TGS3-037-3	37	75	146	270	165	132	246	M6	<4	Fig. 1
TGS3-045-3	45	90	146	270	165	132	246	M6	<4	Fig. 1
TGS3-055-3	55	110	146	270	165	132	246	M6	<4	Fig. 1
TGS3-075-3	75	150	146	270	165	132	246	M6	<4	Fig. 1

Spec. & Model	Rated power (kW)	Rated current (A)	Outline and installation dimensions (mm)						Approx. weight (kg)	Outline drawing
			W1	H1	D	W2	H2	Mounting hole d		
TGS3-090-3	90	180	261	530	195	197	378	M8	<20	Fig. 2
TGS3-115-3	115	230	261	530	195	197	378	M8	<20	Fig. 2
TGS3-132-3	132	264	261	530	195	197	378	M8	<20	Fig. 2
TGS3-160-3	160	320	261	530	195	197	378	M8	<20	Fig. 2
TGS3-185-3	185	370	261	530	195	197	378	M8	<20	Fig. 2
TGS3-200-3	200	400	261	530	195	197	378	M8	<20	Fig. 2
TGS3-250-3	250	500	290	570	251	220	470	M8	<20	Fig. 2
TGS3-280-3	280	560	290	570	251	220	470	M8	<20	Fig. 2
TGS3-320-3	320	640	290	570	251	220	470	M8	<20	Fig. 2
TGS3-355-3	355	710	400	570	251	220	470	M8	<20	Fig. 2

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5 Ordering Notice

When ordering, select the required model and specification according to the model and meaning description:

Example 1: The controlled motor has the power of 45kW, 380V, and used together with a soft start cabinet or power distribution cabinet, with the order model TGS3-045-3;

Example 2: The controlled motor has the power of 90kW, 380V, and used together with a soft start cabinet or power distribution cabinet, with the order model TGS3-090-3;

Selection notice

This soft start is designed for Grade-4 (squirrel cage) three-phase AC asynchronous motor.

a.If motors rather than Grade-4 motor use soft start, it is recommended to select a higher grade:

Example: If the controlled motor has the power 90kW with 8-pole and works with the soft starting cabinet or power distribution cabinet with the order model TGS3-115-3.

b.When two-pole motor is soft started, as the starting current is larger, parameters can be set correctly according to the User Manual.

c.A higher grade of soft starter is recommended for occasion with heavier load.