IC ELECTRONIC A/S

LAUNCH OF THE NEW 3 PHASE REGULATED SOFTSTARTER FAMILY

Modulized compact soft starter family for true three phase regulated soft starting consisting of two models integrated in the already known 90mm housing and a brand new 180mm housing both for DIN rail or back plate mounting.

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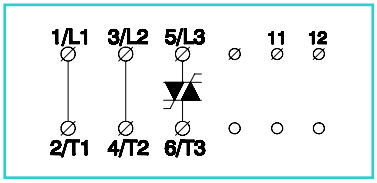
JANUAR 2003

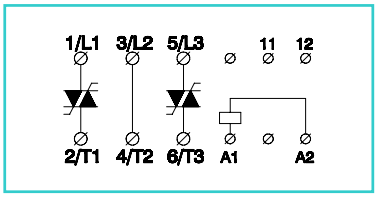
In order to meet the demand from the market requiring a softstarter family which is able to handle a soft start of mechanical loads with high inertia e.g. flywheels, fans, pumps etc. IC-ELECTRONIC A/S now has the pleasure of introducing a new family for soft start and soft stop with a symmetrical regulation of all three phases in the motor. Below you will find more information about this brand new softstarter family.

Current model STL 3



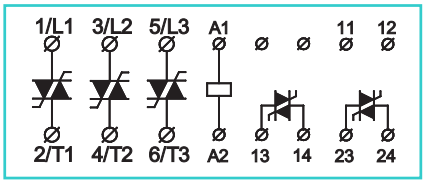
Starting Torque Limiter Family Type STL 3
Inexpensive "softstarter" for start of 1 or 3 phase motors in which a reduction of the mechanical impact on the connected application is required. Limited reduction of the inrush current.

Current model SMC 3



Soft Starter Family Type SMC 3 DA
Cost effective softstarter family, which reduces the inrush current in the connected motor with typical 40-50%, compared with the nominal start current. Very compact and space-saving compared to a standard star / delta starter consisting of three contactors and a timer.

NEW model SMC 33



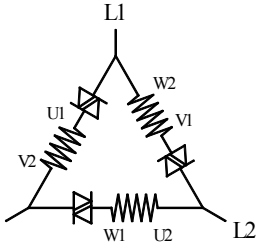
Soft Starter Family Type SMC 33 DA
Brand new softstarter family which regulates the connected motor in all three phases. Ideal for start of mechanical loads with high inertia e.g. flywheels, fans, pumps etc. With a symmetrical regulation of the load it is possible to obtain much longer ramp-up / ramp-down times. This new series of softstartes also feature a limitation of the inrush current with typical 50-65% compared with the nominal start current and, furthermore, a substantial reduction in the mechanical impact on the connected application.

In-line wiring / Inside-delta wiring understanding

Because all three phases are regulated symmetrically it is possible to offer this family in two different models:
1) One type for in-line standard wiring configuration. 2) One type for inside-delta (√3) wiring configuration.

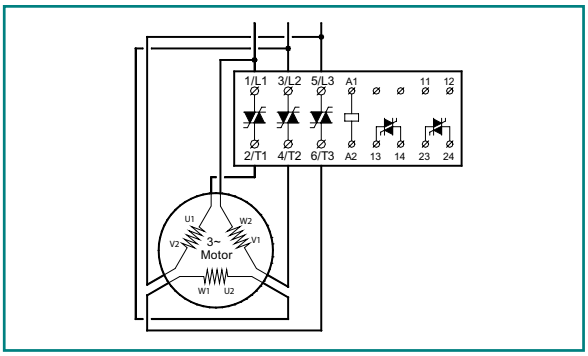
What is the difference between these two configurations?

When using the in-line standard configuration the full nominal current is monitored by the thryristors inside the softstarter. When using the inside-delta configuration the nominal current is still monitored by the thyristors but reduced with √3, which increases the load performance of the soft starter. Below you will find information how to connect the motor.

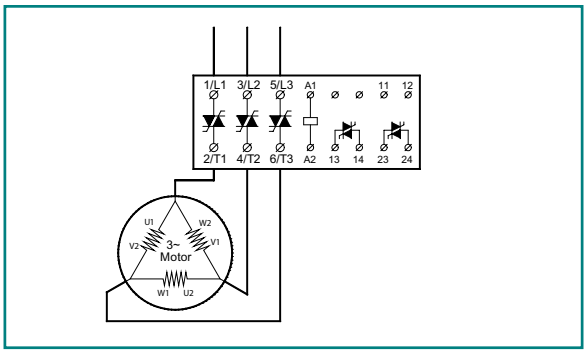


This diagram shows the principle of an inside-delta wiring configuration. You will see that the soft starter is connected between the motor windings L1-L2 / L2-L3 / L3-L1.
In this way you will be able to start/stop the three phase motor with √3 higher motor current. That means that we can now offer a softstarter for motor loads up to 45kW. Furthermore, it is possible to operate a motor with a 73% higher motor rating using the same sized softstarter. The only difference is that the motor has to be connected with the soft starter using 6 wires like a standard start-delta configuration.

Inside-delta (· 3) wiring configuration



In-line wiring of a 3 Phase configura-



Selling arguments

* **A reel Star-Delta killer**
* **For application in which high inertia loads occurs**
* **Specially designed for start and stop of heavy loads e.g. flywheels, fans, pumps etc.**
* **SRC output by end of Ramp-up time for by-pass function**
* **SRC output signal for Start / Stop function**
* **Ramp-up time from 0.5-30 sec / Ramp-down time from 0.5-60 sec**
* **Initial Torque is adjustable from 0-85% with or without break-loose function**
* **Unlimited number of start/stop operations pr. hour**

Item overview, availability and prices

Housing size h x d x w	Item number	Motor load @ 400 V* without by-pass function	Motor load @ 400 V* with by-pass function	Availability
94 x 128 x 90 mm	SMC 33 4015	15 A	NA	Feb. 2003
94 x 128 x 90 mm	SMC 33 4025 BP	17 A	25 A	Feb. 2003
94 x 128 x 90 mm	SMC 33 4040 DBP (Inside-delta 3)	29 A	43 A	April 2003
140 x 144 x 180 mm	SMC 33 4050 BP	35 A	50 A	March 2003
140 x 144 x 180 mm	SMC 33 4085 DBP (Inside-delta 3)	60 A	86 A	April 2003

Also available in 3 x 230 & 3 x 600 Volt Line Voltage

Data

On the attached datasheets you will find more specific details and technical data concerning this new soft starter family.

We are looking forward to receiving your first order. Please note that IC ELECTRONIC A/S now is able to offer you a complete family of soft starter from 0.1kW to 45kW.