

UL / FM CERTIFIED ELECTRIC MOTOR CONTROLLER

MICROPROCESSOR BASED CONTROLLER

NAFFCO Electric Motor Controllers for fire pumps are listed by Underwriters Laboratories (UL file number EX15064), in accordance with UL 218 (Standard for Fire Pump Controllers), UL 508 (Standard for Industrial Control Equipment), NFPA 20 (Standard for the Installation of Stationary Pumps for Fire Protection), NFPA 70 (National Electrical Code) and relevant NEMA standards.

Also approved by FM approvals (Factory Mutual), in accordance with FM standard 1321/1323 (Approval Standard for Controllers for Electric Motor Driven and Diesel Engine Driven Fire Pumps).

Only high quality UL listed or UL recognized components are used in these panels to guarantee the best possible reliability. Also high quality UL listed enclosures are used.

ELECTRIC CONTROLLER STARTER TYPES:

- NFY-DOM1** (*Direct on Line*)
- NFY-SDM1** (*Star Delta*)
- NFY-SSM1** (*Soft Starter*)

ENCLOSURE OPTIONS :

- NEMA 2, NEMA 4, NEMA 4x, NEMA 12**



DOL, Y-DELTA & SOFT STARTER CONTROLLER SUMMARY RATINGS

Power Rating	15 - 400 HP
Voltage	230 / 380 / 415 v AC (UL/FM), 480 V (UL)
Frequency	50 / 60 Hz
Short Circuit Rating	100 kA

ADVANTAGES OF SOFT STARTER FIRE PUMP CONTROLLER

Low starting current during startup of motor (Around 150% of rated current), with soft gradual ramp (no current peak).
Smooth soft starting and soft stopping.
Significant reduction in mechanical stresses of the coupling and transmission devices (gearboxes, pulleys, gears, conveyors, etc.) during start (no torque peak).
Increases motor and equipment lifetime due to the elimination of mechanical shock.
Avoids the "Water Hammer" in pumps, and pressure surges, and so having longer life for pipe lines.
Using power electronic semiconductors (Thyristors) to control the motor voltage at starting up and at stopping, and a built in single contactor for continuous steady operation.
Connected to motor through 3 terminals, so it requires less cabling (3 cables), and easier setup and installation.
Fire pump controller is rated 50 degree ambient, and soft starter unit is rated 55 degree ambient (UL Listed).
Limitation of voltage drop during start up, so less rated power source is needed.
Controls the variation of the firing angle of thyristor bridge generating a gradual and continuous effective voltage at its output and it is increased until the rated line voltage is reached.
Gradually reduces the output voltage to a minimum value in a preset time thus providing a highly controlled and highly secure stop of the connected firefighting pump.