



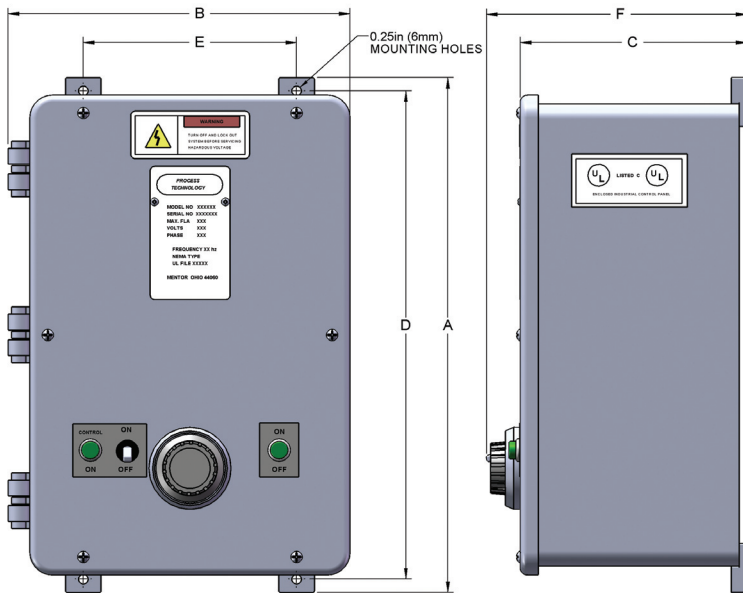
NR SERIES, NON-INDICATING COMBINATION CONTROLS							
MODEL NUMBER	VOLTS	MAX. AMPS	REPL. RELAY P/N	REPL. RELAY P/N LESS TRANS.	REPL. TRANS.	REPL. SENSOR P/N	SHIP WGT. Lbs./ (kg)
NR302	240	30	AH30-1	AH30-2	HD50 2/1	NR25-5L	15
NR304	480	30	AH30-1	---	HD50 4/1	NR25-5L	(7)
NR502	240	50	AH50-1	AH50-2	HD50 2/1	NR25-5L	16
NR504	480	50	AH50-1	---	HD50 4/1	NR25-5L	(7.5)
NR752	240	75	AH75-1	AH75-2	HD100 2/1	NR25-5L	22
NR754	480	75	AH75-1	---	HD100 4/1	NR25-5L	(10)
NR902	240	90	AH90-1	AH90-2	HD100 2/1	NR25-5L	24
NR904	480	90	AH90-1	---	HD100 4/1	NR25-5L	(11)
NR1202	240	120	AH120-1	AH120-2	HD100 2/1	NR25-5L	26
NR1204	480	120	AH120-1	---	HD100 4/1	NR25-5L	(12)
NR1502	240	150	AH150-1	AH150-2	HD150 2/1	NR25-5L	32
NR1504	480	150	AH150-1	---	HD150 4/1	NR25-5L	(14.5)

Combination control consists of gasketed plastic enclosure, thermostat, contactor and optional control transformer. To omit step-down transformer, add "LT" to end of model number.

## Product Features and Benefits:

- ◆ **IMPROVES PROCESS CONTROL:** Large, easy to read dial. Provides general control for consistent plating and etch rates in most aqueous processes.
- ◆ **TEMPERATURE SENSOR:** Fluoropolymer (FEP) covered, 5-foot (1.5m) copper bulb and capillary included standard with the control. Provides extended service in corrosive liquids. Ethylene glycol filled system.
- ◆ **CORROSION RESISTANT ENCLOSURE:** Vapor resistant, NEMA 1, IP23, flame retardant gasketed plastic enclosure with stainless steel hardware.
- ◆ **CERTIFICATIONS:** cULus.
- ◆ **CAPACITIES:**
  - Large switching capacities from 30 to 150 amps for 120 to 600 volts.
  - Adjustable temperature range from 30°F to 220°F.
  - +/- 5°F accuracy.
  - 30°F (-1°C) to 150°F (65°C) ambient temperature range.
  - Single or three phase.
  - Control transformers required above 240 volts, recommended for 200 to 240 volt service.
- ◆ **SAFETY FEATURES:**
  - Pre-wired P1 terminal blocks.
  - Ground connection on wiring panel.
- ◆ **OPTIONS AVAILABLE (consult factory):**
  - 12-foot (3.6m) sensors.
  - Pre-wired outlets for plug-in heaters (some sizes).
  - GFP circuitry.
  - P2, P3 or P8 thermal protection systems.
  - Integral liquid level components.
  - Front panel mounted digital timers.
  - 200°F to 550°F temperature range.
  - Outdoor enclosures.

## DIMENSIONS



Dimensions	30-50 Amps	75-120 Amps	150 Amps
A	14.375" (365mm)	18" (457mm)	20.25" (514mm)
B	6" (152mm)	10" (254mm)	12" (305mm)
C	6.25" (159mm)	7.625" (194mm)	8.375" (213mm)
D	13.625" (346mm)	17" (432mm)	19.25" (489mm)
E	9.63" (245mm)	13.75" (349mm)	15.75" (400mm)
F	7.03" (175mm)	8.4" (213mm)	9.15" (232mm)

## NR COMBINATION CONTROL ORDERING INFORMATION

Series	Amperes	Voltage	Stepdown Transformer	Standard Options
NR	30 50 75 90 120 150  1 = 120 2 = 240 3 = 380 4 = 480 5 = 415 6 = 600 7 = 400 8 = 208 9 = 220 0 = 200		-LT = no transformer (not for voltages higher than 240V)	-P2 = thermal protector 2 -P3 = thermal protector 3 -P8 = thermal protector 8 -LC = conductive liquid level -ESP = capacitive liquid level terminals -DTS = digital timer -GFP = ground fault detection -12 = 12 foot sensor -H = high temperature range (200-500°F) -E = receptacle for plug-in heater

### ORDERING EXAMPLE:

NR302-LT-P2

NR series combination control, 30 amps, 240 volt, less step down transformer, P2 thermal protector option.

**PROCESS  
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