

# ITT

BCPCL16

## Residential Water Systems

# CentriPro

## Class 16 Definite Purpose Starters

by Siemens/Furnas



CentriPro is a brand of ITT Corporation.

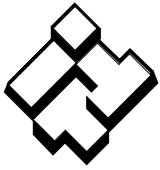
[www.centripro.com](http://www.centripro.com)

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### **STARTER FEATURES**

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- Class 16 Starters Use Field Proven Class 42 Contactors
- Class 42 Contactor Construction Features:
  - Compact Size
  - Weld Resistant Silver Cadmium Oxide Contacts
  - Reinforced Thermoset Polyester Housing
  - Snap-On Electrical/Mechanical Interlocks
- Ambient Compensated Bi-Metallic Overloads Required on A-E, H & I Sizes (order K or E overload heaters separately)
- Dependable Overload Relays for Both Class 10 and Class 20 Protection:
  - Use Class 10 "K" Overloads on Submersible Motors
  - Use Class 20 "E" Overloads on Above Ground Motors
- Solid-State ESP100 Adjustable Overloads Standard on 16F (75A) and 16G (90A) Sizes:
  - Size 16F overloads are adjustable from 45 - 75 amps
  - Size 16G overloads are adjustable from 45 - 90 amps
- Single and Dual Voltage Coils Available – see sizing chart for available coil voltages
- Coil Wiring Terminal Strip on Dual Voltage, 230/460V, C Coil Models
- Easy to Read Wiring Diagrams
- Generic CentriPro Brand Can Increase Incremental Sales
- Units come factory set for Manual overload reset



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## CENTRIPRO Residential Water Systems

### SELECTION AND NOMENCLATURE CHART

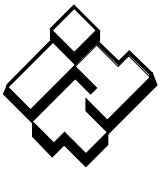
1st & 2nd Class	3rd Char Size	4th Char. Coil Code	Coil Voltage	Maximum S.F. Amps	Locked Rotor Amps		
					200/230V	460V	575V
16	A	A	115/230	25	150	125	100
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				
16	B	A	115/230	30	180	150	120
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				
16	C	A	115/230	40	240	200	160
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				
16	D	A	115/230	50	300	250	200
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				

1st & 2nd Class	3rd Char Size	4th Char. Coil Code	Coil Voltage	Maximum S.F. Amps	Locked Rotor Amps		
					200/230V	460V	575V
16	E	A	115/230	60	360	300	240
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				
16	F*	A	115/230	45 - 75 *	450	375	300
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				
16	G*	A	115/230	45 - 90 *	540	450	360
		F	115				
		D	200				
		G	230				
		H	460				
		C	230/460				
		E	575				

\* 16F & 16G size starters are equipped with ESP100 adjustable overloads and therefore do not require K heaters.

16F starters have an adjustable overload range of 45 - 75 amps

16G starters have an adjustable overload range of 45 - 90 amps



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### OVERLOAD RELAY HEATER SELECTION TABLES

Data Based on Furnas Tables 393 and 398 for Three-Phase Motors

Class 16 DP Model		K Heater No.
Motor SF Amps		
16A, 16B, 16C	16D, 16E	
1.91	—	K21
2.08	—	K22
2.26	—	K23
2.44	—	K24
2.7	—	K26
2.98	—	K27
3.22	—	K28
3.61	—	K29
3.93	—	K31
4.23	—	K32
4.67	—	K33
5.02	—	K34
5.46	—	K36
6.25	—	K37
6.74	—	K39
7.25	—	K41
8.05	—	K42
8.55	—	K43
9.8	—	K49
10.3	—	K50
12.0	—	K52
12.5	—	K53
13.6	—	K54
14.7	—	K55
15.5	—	K56
16.9	—	K57
17.9	—	K58
19.1	—	K60
22.0	22.5	K61
23.6	24.1	K62
25.2	25.7	K63
27.0	28.0	K64
30.0	31.1	K67
34.0	34.6	K69
37.1	37.8	K70
41.0	41.5	K72
46.0	50.0	K73
49.2	54.0	K74
56.0	57.0	K75
—	60.0	K76
—	66.0	K77
—	73.0	K78
—	80.0	K79

Class 16 DP Model		K Heater No.
Motor SF Amps		
16F, 16G <sup>①</sup>	16H, 16I	
50.2	50.1	K72
53.2	53.1	K73
58.0	58.0	K74
62.2	62.1	K75
65.5	65.5	K76
72.0	72.0	K77
80.0	80.0	K78
—	—	K79
85.0	85.0	K83
93.0	93.0	K85
97.5	97.5	K86
104	104	K87
—	114	K88
119	126	K89
—	136	K90
—	150	K92
—	162	K93
—	180	K94
—	190	K96
—	200	K97

Selection tables are used with the motor service factor amps if known, otherwise use motor full load amps multiplied by a factor of 1.15. Select the heater closest to but higher than the SFA (motor trip amps).

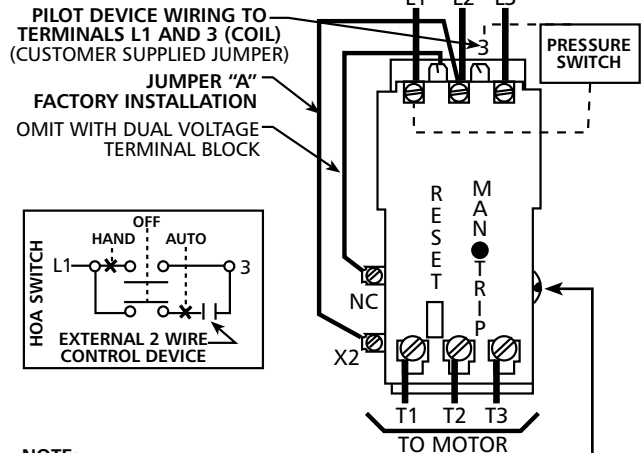
**NOTE:** These charts are only for Class 16 Definite Purpose, Ambient Compensated Starters (identified by a green reset button) using Quick Trip (class 10) K heaters for Submersible Motors. Other Classes or Brands of Starters require different selection tables, consult the manufacturer for information specific to that brand/class.

Selection example: Motor service factor amps = 9. If using a 16AC starter, select a K49 heater since it is the next higher heater amp rating number above 9 amps.

① Our current 16F and 16G starters are equipped with ESP100 adjustable overloads and do not require heaters. Use this chart only for older starters requiring K heaters.

Starter Size / Max. Amps	
16A / 25	16F / 75
16B / 30	16G / 90
16C / 40	16H / 120
16D / 50	16I / 150
16E / 60	

#### THREE PHASE STARTER CENTRIPRO (MODELS 16AF, BF, CF, DF AND EF)



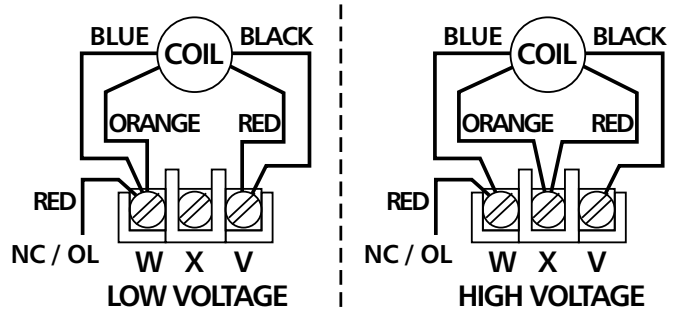
**NOTE:** FOR SEPARATE CONTROL VOLTAGE SOURCE REMOVE JUMPER "A" IF INSTALLED. CONNECT CONTROL SOURCE TO "L1" ON PILOT DEVICE AND TO "X2" ON OVERLOAD RELAY.

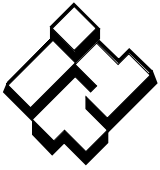
**Dial with V groove:**  
Rotate this dial to adjust overload trip setting  $\pm 15\%$ .

**Dial with Tab:**  
Auto/Manual reset

#### DUAL VOLTAGE, 230/460 "C" COIL WIRING CONNECTIONS

Effective September 2005, 16\_\_C models have this coil wiring terminal strip for simplified coil wiring.





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