

SECTIONS

9

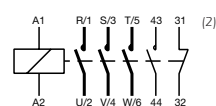
12

18

22



CONTACTOR<sup>(2)</sup>



CONTROL VOLTAGE	kg	0,33	0,33	0,37	0,37
24V - 50/60 Hz		090C9-24	090C12-24	090C18-24	090C22-24
48V - 50/60 Hz		090C9-48	090C12-48	090C18-48	090C22-48
110V - 50/60 Hz		090C9-110	090C12-110	090C18-110	090C22-110
220V - 50/60 Hz		090C9-220	090C12-220	090C18-220	090C22-220
380V - 50/60 Hz		090C9-380	090C12-380	090C18-380	090C22-380

PERFORMANCE IN ACCORDANCE WITH IEC-60947

AC1	20A	20A	25A	32A
AC3 200~240V	2.5 kW 11 A	3 kW 13 A	4.5 kW 18 A	5.5 kW 22 A
<b>380~440V</b>	<b>4 kW 9 A</b>	<b>5.5 kW 12 A</b>	<b>7.5 kW 18 A</b>	<b>11 kW 22 A</b>
500~550V	4 kW 7 A	7.5 kW 12 A	7.5 kW 13 A	15 kW 22 A
690V	4 kW 5 A	7.5 kW 9 A	7.5 kW 9 A	15 kW 18 A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

lth	20A	25A	30A	32A
Mono-phase 115V	0.5 HP	0.5 HP	1 HP	2 HP
230V	1 HP	2 HP	3 HP	3 HP
Trif-phase 200V	2 HP	3 HP	5 HP	7 HP
230V	2 HP	3 HP	5 HP	7.5 HP
460V	5 HP	7.5 HP	10 HP	10 HP
575V	7.5 HP	10 HP	15 HP	15 HP

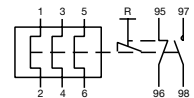
RELAY

kg	SETTING RANGE (A)	CODE	SETTING RANGE (A)	CODE
0,11	0.1 ... 0.16	090R22-016	2.5 ... 4	090R22-4
	0.16 ... 0.25	090R22-025	4 ... 6	090R22-6
	0.25 ... 0.4	090R22-04	5 ... 8	090R22-8
	0.4 ... 0.63	090R22-063	6 ... 9	090R22-9
	0.63 ... 1	090R22-1	7 ... 10	090R22-10
	1 ... 1.6	090R22-1V6	9 ... 13	090R22-13
	1.6 ... 2.5	090R22-2V5	12 ... 18	090R22-18
		16 ... 22	090R22-22	

gr.		CODE
44	Bar mounting adapter DIN 35	090DINS



THERMAL O/L RELAY



SEPARATE MOUNTING SYSTEM



SIDE MOUNTING CONTACT BLOCK



TOP MOUNTING CONTACT BLOCK

AUXILIARY CONTACTS

gr.	1NO+1NC
33	090AL11

gr.	2NO	2NC	1NO+1NC
23	090AF20	090AF02	090AF11

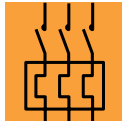
gr.	4NO	4NC	3NO+1NC	1NO+3NC	2NO+2NC
50	090AF40	090AF04	090AF31	090AF13	090AF22



- 1) Maximum nominal power
- 2) Auxiliary contact 1NO - 1NC integrated in the contactor



MEDIUM Series

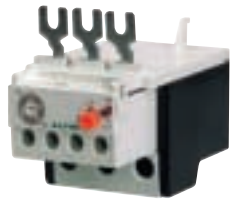
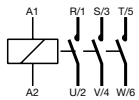


SECTIONS

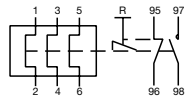
<b>32</b>	<b>40</b>
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CONTACTORS



THERMAL O/L RELAY



SEPARATE MOUNTING SYSTEM



SIDE MOUNTING CONTACT BLOCK



TOP MOUNTING CONTACT BLOCK

CONTROL VOLTAGE	32	40
24V - 50/60 Hz	090C32-24	090C32-24
48V - 50/60 Hz	090C32-48	090C32-48
110V - 50/60 Hz	090C32-110	090C32-110
220V - 50/60 Hz	090C32-220	090C32-220
380V - 50/60 Hz	090C32-380	090C32-380

PERFORMANCE IN ACCORDANCE WITH IEC-60947

AC1	50A	60A
AC3 200~240V	7.5 kW 32 A	11 kW 40 A
<b>380~440V</b>	<b>15 kW 32 A</b>	<b>18.5 kW 40 A</b>
500~550V	18.5 kW 28 A	22 kW 32 A
690V	18.5 kW 20 A	22 kW 23 A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

I <sub>th</sub>	45A	50A
Mono-phase 115V	2 HP	3 HP
230V	5 HP	5 HP
Tri-phase 200V	7.5 HP	10 HP
230V	10 HP	10 HP
460V	20 HP	25 HP
575V	20 HP	25 HP

RELAY

	SETTING RANGE (A)	CODE
0,17	18 ... 26	090R40-26
	24 ... 36	090R40-36
	28 ... 40	090R40-40

	CODE
72 Bar mounting adapter DIN 35	090DINM

AUXILIARY CONTACTS

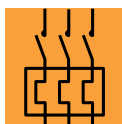
	1NO+1NC
33	090AL11

	2NO	2NC	1NO+1NC
23	090AF20	090AF02	090AF11

	4NO	4NC	3NO+1NC	1NO+3NC	2NO+2NC
50	090AF40	090AF04	090AF31	090AF13	090AF22



1) Maximum nominal power



SECTIONS

50

65

75

85

CONTROL VOLTAGE	kg	0,94	0,94	0,94	0,94
24V - 50/60 Hz		090C50-24	090C65-24	090C75-24	090C85-24
48V - 50/60 Hz		090C50-48	090C65-48	090C75-48	090C85-48
110V - 50/60 Hz		090C50-110	090C65-110	090C75-110	090C85-110
220V - 50/60 Hz		090C50-220	090C65-220	090C75-220	090C85-220
380V - 50/60 Hz		090C50-380	090C65-380	090C75-380	090C85-380

PERFORMANCE IN ACCORDANCE WITH IEC-60947

AC1	80A	100A	110A	135A
AC3 200~240V	15 kW 55 A	18.5 kW 65 A	22 kW 75 A	25 kW 85 A
<b>380~440V</b>	<b>22 kW 50 A</b>	<b>30 kW 65 A</b>	<b>37 kW 75 A</b>	<b>45 kW 85 A</b>
500~550V	30 kW 43 A	33 kW 60 A	45 kW 64 A	45 kW 75 A
690V	30 kW 28 A	33 kW 35 A	45 kW 47 A	45 kW 52 A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

Ith	70A	80A	90A	100A
Mono-phase 115V	3 HP	5 HP	5 HP	7.5 HP
230V	7.5 HP	10 HP	15 HP	15 HP
Tri-phase 200V	10 HP	15 HP	20 HP	25 HP
230V	15 HP	20 HP	25 HP	30 HP
460V	30 HP	40 HP	50 HP	50 HP
575V	30 HP	40 HP	50 HP	50 HP

RELAY

kg	SETTING RANGE (A)	CODE
0,3	34 ... 50	090R85-50
	45 ... 65	090R85-65
	54 ... 75	090R85-75
	63 ... 85	090R85-85

gr.		CODE
144	Bar mounting adapter DIN 35	090DINL

AUXILIARY CONTACTS

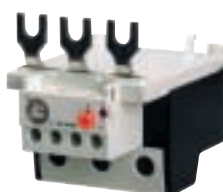
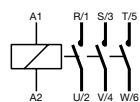
gr.	1NO+1NC
33	090AL11

gr.	2NO	2NC	1NO+1NC
23	090AF20	090AF02	090AF11

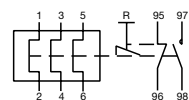
gr.	4NO	4NC	3NO+1NC	1NO+3NC	2NO+2NC
50	090AF40	090AF04	090AF31	090AF13	090AF22



CONTACTORS



THERMAL O/L RELAY



SEPARATE MOUNTING SYSTEM



SIDE MOUNTING CONTACT BLOCK



TOP MOUNTING CONTACT BLOCK



1) Maximum nominal power



X LARGE Series



SECTIONS

**105**

**120**

CONTROL VOLTAGE	105	120
24V - 50/60 Hz 24VCC	090C105-24	090C120-24
48V - 50/60 Hz 48VCC	090C105-48	090C120-48
110-240V - 50/60 Hz 100-220VCC	090C105-100	090C120-100
380-450V - 50/60 Hz	090C105-400	090C120-400

**150**

CONTROL VOLTAGE	150
24V - 50/60 Hz 24VCC	090C150-24
48V - 50/60 Hz 48VCC	090C150-48
110-240V - 50/60 Hz 100-220VCC	090C150-100
380-450V - 50/60 Hz	090C150-400

PERFORMANCE IN ACCORDANCE WITH IEC-60947

AC1	150A	150A	200A
AC3 200~240V	30 kW 105 A	37 kW 125 A	45 kW 150 A
<b>380~440V</b>	<b>55 kW 105 A</b>	<b>60 kW 120 A</b>	<b>75 kW 150 A</b>
500~550V	55 kW 85 A	60 kW 90 A	90 kW 140 A
690V	55 kW 65 A	60 kW 70 A	90 kW 100 A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

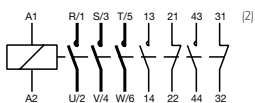
I <sub>th</sub>	160A	160A	210A
Monofase 115V	7.5 HP	10 HP	15 HP
230V	15 HP	20 HP	25 HP
Trifase 200V	30 HP	40 HP	40 HP
230V	30 HP	40 HP	50 HP
460V	60 HP	75 HP	100 HP
575V	60 HP	75 HP	100 HP



CONTACTORS



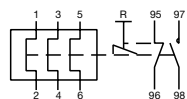
CONTACTORS<sup>(2)</sup>



THERMAL O/L RELAY<sup>(3)</sup>



THERMAL O/L RELAY<sup>(3)</sup>



RELAY

**105**

**120**

	SETTING RANGE (A)	CODE
0,49	65 ... 100	090R100-125
	85 ... 125	090R125-125

RELAY

**150**

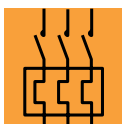
	SETTING RANGE (A)	CODE
0,6	100 ... 150	090R150-150

AUXILIARY CONTACTS

	1NO+1NC
45	090A11



- 1) Maximum nominal power
- 2) Complete with n. 2 090A11
- 3) Possibility for wall mounting



SECTIONS

180

250

CONTROL VOLTAGE	5,4	5,4
24V - 50/60 Hz 24VCC	<b>090C180-24</b>	<b>090C250-24</b>
48V - 50/60 Hz 48VCC	<b>090C180-48</b>	<b>090C250-48</b>
110-240V - 50/60 Hz 100-220VCC	<b>090C180-100</b>	<b>090C250-100</b>
380-450V - 50/60 Hz	<b>090C180-400</b>	<b>090C250-400</b>

SECTIONS

300

400

CONTROL VOLTAGE	9,2	9,2
110-240V - 50/60 Hz 100-220VCC	<b>090C300-100</b>	<b>090C400-100</b>
380-450V - 50/60 Hz	<b>090C300-400</b>	<b>090C400-400</b>

PERFORMANCE IN ACCORDANCE WITH IEC-60947

AC1	230A	260A	350A	420A
AC3 200~240V	55 kW 180A	75 kW 250A	90 kW 300A	125 kW 400A
<b>380~440V</b>	<b>90 kW 180A</b>	<b>132 kW 250A</b>	<b>160 kW 300A</b>	<b>220 kW 400A</b>
500~550V	110 kW 180A	132 kW 200A	160 kW 250A	225 kW 350A
690V	110 kW 120A	132 kW 150A	200 kW 220A	250 kW 300A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

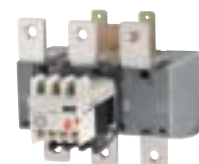
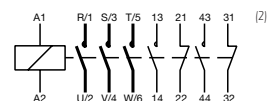
I <sub>th</sub>	230A	275A	350A	450A
Mono-phase 115V	15 HP	15 HP		
230V	30 HP	40 HP		
Tri-phase 200V	60 HP	60 HP	100 HP	125 H
230V	60 HP	75 HP	100 HP	150 HP
460V	125 HP	150 HP	200 HP	300 HP
575V	125 HP	150 HP	200 HP	300 HP



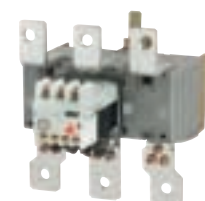
CONTACTORS



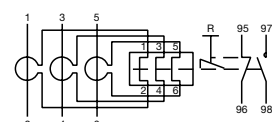
CONTACTORS



THERMAL O/L RELAY<sup>(3)</sup>



THERMAL O/L RELAY<sup>(3)</sup>



RELAY

180

250

	SETTING RANGE (A)	CODE
2,5	120 ... 180	<b>090R240-180</b>
	160 ... 240	<b>090R240-240</b>

300

400

	SETTING RANGE (A)	CODE
2,6	220 ... 300	<b>090R300-400</b>
	260 ... 400	<b>090R400-400</b>

AUXILIARY CONTACTS

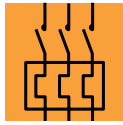
	1NO+1NC
45	<b>090A11</b>



- 1) Maximum nominal power
- 2) Complete with n. 2 090A11
- 3) Possibility for wall mounting



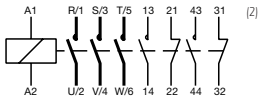
Serie XX LARGE



**630**      **800**

SECTIONS

CONTROL VOLTAGE 	630	800
100-127V - 50/60 Hz	<b>090C630-100</b>	<b>090C800-100</b>
200-240V - 50/60 Hz	<b>090C630-200</b>	<b>090C800-200</b>
380-450V - 50/60 Hz	<b>090C630-400</b>	<b>090C800-400</b>



PERFORMANCE IN ACCORDANCE WITH IEC-60947

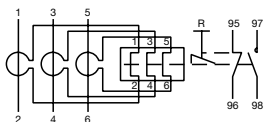
AC1	660A	800A
AC3 200~240V	190 kW 630A	220 kW 800A
<b>380~440V</b>	<b>330 kW 630A</b>	<b>440 kW 800A</b>
500~550V	330 kW 500A	500 kW 720A
690V	330 kW 420A	500 kW 630A

PERFORMANCE IN ACCORDANCE WITH UL/CSA<sup>(1)</sup>

lth	660A	900A
Tri-phase 200V	150 HP	250 HP
230V	200 HP	300 HP
460V	400 HP	600 HP
575V	400 HP	600 HP



THERMAL O/L RELAY<sup>(3)</sup>



RELAY

	SETTING RANGE (A)	CODE
5,5	400 ... 600	<b>090R800-600</b>
	520 ... 800	<b>090R800-800</b>

AUXILIARY CONTACTS

	1NO+1NC
45	<b>090A11</b>



- 1) Maximum nominal power
- 2) Complete with n. 2 090A11
- 3) Possibility for wall mounting



## AUXILIARY CONTACTS

SECTIONS **9** **12** **18** **22** **32** **40** **50** **65** **75** **85**

SIDE MOUNTING



TOP MOUNTING



TOP MOUNTING

gr.		CODE
33	1NO+1NC	090AL11
28	1NO+1NC	090AF11
28	2NO	090AF20
28	2NC	090AF02
50	4NO	090AF40
50	3NO+1NC	090AF31
50	2NO+2NC	090AF22
50	1NO+3NC	090AF13
50	4NC	090AF04

090



SIDE MOUNTING

SECTIONS **105** **120** **150** **180** **250** **300** **400** **630** **800**

gr.		CODE
45	1NO+1NC	090A11



## MECHANICAL INTERLOCK

SECTIONS **9** **12** **18** **22** **32** **40** **50** **65** **75** **85**MECHANICAL INTERLOCK WITH ACCESSORY<sup>1)</sup>

gr.		CODE
30		090IM85



MECHANICAL INTERLOCK

SECTIONS **105** **120** **150**

gr.		CODE
90		090IM150



MECHANICAL INTERLOCK

SECTIONS **180** **250** **300** **400**

gr.		CODE
90		090IM400



MECHANICAL INTERLOCK

SECTIONS **630** **800**

gr.		CODE
90		090IM800



1) Accessory which enables the flanked mounting of the contacts in a safe and secure way.



## MECHANICAL LATCH

## SECTIONS

**9 12 18 22 32 40**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM40-110
140	200-240V 50-60Hz	090AM40-240
	380-440V 50-60Hz	090AM40-440

## SECTIONS

**50 65 75 85**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM85-110
140	200-240V 50-60Hz	090AM85-240
	380-440V 50-60Hz	090AM85-440

## SECTIONS

**105 120**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM120-110
1600	200-240V 50-60Hz	090AM120-240


## SECTIONS

**150**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM150-110
1700	200-240V 50-60Hz	090AM150-240

## SECTIONS

**180 250**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM250-110
2000	200-240V 50-60Hz	090AM250-240

## SECTIONS

**300 400**

	CONTROL VOLTAGE	CODE
	100-127V 50-60Hz	090AM400-110
2400	200-240V 50-60Hz	090AM400-240



## PNEUMATIC TIMER

## SECTIONS


**9 12 18 22 32 40 50 65 75 85**

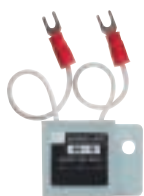
	CONTROL VOLTAGE	CODE
100	Delay ON pneumatic timer 1-30s	090UT-1N
100	Delay ON pneumatic timer 10-180s	090UT-2N
100	Delay OFF pneumatic timer 1-30s	090UT-1F
100	Delay OFF pneumatic timer 10-180s	090UT-2F

## SURGE SUPPRESSOR RC UNIT

## SECTIONS

**9 12 18 22 32 40 50 65 75 85**

	CONTROL VOLTAGE	CODE
150	Surge suppressor RC 0.1μ F100Ω 24-48V	090RC48
150	Surge suppressor RC 0.1μ F100Ω 110V	090RC110
150	Surge suppressor RC 0.1μ F100Ω 220V	090RC220







## CONTROL COILS

## SECTIONS

**9 12 18 22 32 40**

gr.	CONTROL VOLTAGE	CODE
80	24V 50-60Hz	090B40-24
	48V 50-60Hz	090B40-48
	110V 50-60Hz	090B40-110
	220V 50-60Hz	090B40-220
	380V 50-60Hz	090B40-380

## SECTIONS

**50 65 75 85**

gr.	CONTROL VOLTAGE	CODE
160	24V 50-60Hz	090B85-24
	48V 50-60Hz	090B85-48
	110V 50-60Hz	090B85-110
	220V 50-60Hz	090B85-220
	380V 50-60Hz	090B85-380

## SECTIONS

**105 120 150**

gr.	CONTROL VOLTAGE	CODE
480	24V 50-60Hz	24VCC 090B150-24
	48V 50-60Hz	48VCC 090B150-48
	100-240V 50-60Hz	100-220VCC 090B150-100
	380-450V 50-60Hz	090B150-400

## SECTIONS

**180 250 300 400**

gr.	CONTROL VOLTAGE	CODE	gr.	CODE
670	24V 50-60Hz	24VCC	980	090B250-24
	48V 50-60Hz	48VCC		090B250-48
	100-240V 50-60Hz	100-220VCC		090B250-100
	380-450V 50-60Hz			090B250-400

## SECTIONS

**630 800**

gr.	CONTROL VOLTAGE	CODE
1.850	100-127V 50-60Hz	090B800-100
	200-240V 50-60Hz	090B800-200
	380-450V 50-60Hz	090B800-400

SET OF SPARE POLES <sup>(1)</sup>

## SECTIONS

**9 12 18 22 32 40 50 65 75 85**

gr.	12	13	23	25	43	45	106	107	110	113
	090CP9	090CP12	090CP18	090CP22	090CP32	090CP40	090CP50	090CP65	090CP75	090CP85

## SECTIONS

**105 120 150 180 250 300 400 630 800**

gr.	225	230	390	735	740	1485	1500	2400	2450
	090CP105	090CP120	090CP150	090CP180	090CP250	090CP300	090CP400	090CP630	090CP800



1) Each individual code corresponds to a kit composed of 3 moved and 6 fixed contacts