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# Contactors





[www.IDEC.com/contactor](http://www.IDEC.com/contactor)



Selection Guide

Selection by Horsepower Rating (AC Coil)

Series	YC1N(K) Mini series	YC1U AC Series	YC1N AC Series
			
Coil Voltage	AC or DC	AC	AC
Amp Range (AC3)	9A & below	9A - 80A	80A - 300A
Page	883	887	894

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

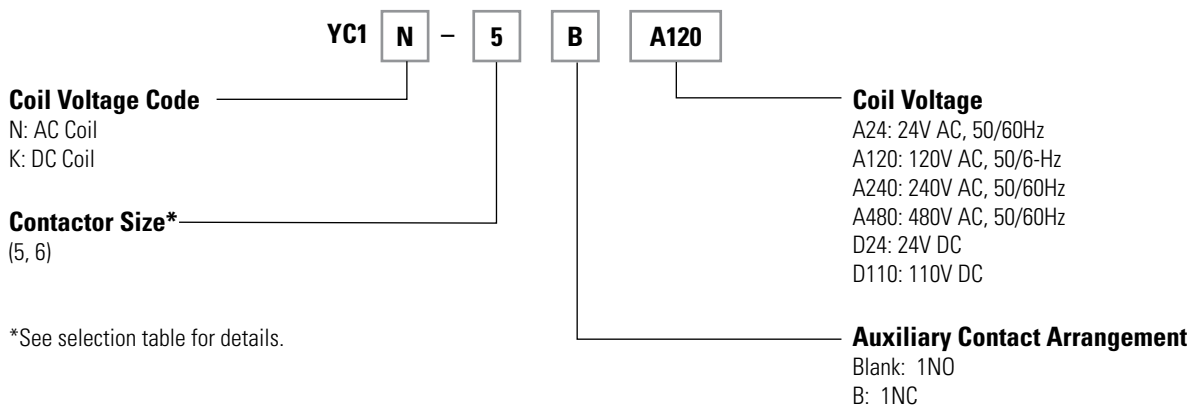
Terminal Blocks

Circuit Breakers

YC1N(K) Mini Contactors



Part Number Key



Part Numbers

Selection by Horsepower Rating (AC Coil)

	Rated Power (Hp) per AC3 IEC 60947-4-1							Rated Power (Hp) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase					1-Phase		3-Phase						
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
	0.5	1	2	4	4	4	4	-	-	2	2	3	3	1NO	YC1N-5	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
														1NC	YC1N-5B	
	0.75	1.5	3	5.5	5.5	5.5	5.5	-	-	3	3	5	5	1NO	YC1N-6	
														1NC	YC1N-6B	

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors


Terminal Blocks

Circuit Breakers

Switches & Pilot Lights

Signaling Lights

**Selection by Horsepower Rating (DC Coil)**

	Rated Power (Hp) per AC3 IEC 60947-4-1							Rated Power (Hp) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase					1-Phase		3-Phase						
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
	0.5	1	2	4	4	4	4	-	-	2	2	3	3	1NO	YC1K-5	+ D24: 24V DC D110: 110V DC
														1NC	YC1K-5B	
	0.75	1.5	3	5.5	5.5	5.5	5.5	-	-	3	3	5	5	1NO	YC1K-6	
														1NC	YC1K-6B	

Relays & Sockets

**Selection by Amp Rating (AC Coil)**

	Rated Power (A) per AC3 IEC 60947-4-1							Rated Power (A) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase					1-Phase		3-Phase						
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
	8	7	7.5	7	6.5/6	5	4	-	-	7.5	6.8	4.8	3.9	1NO	YC1N-5	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
														1NC	YC1N-5B	
	10.5	10	10.1	9	8.5/8	6.5	5	-	-	11	9.6	7.6	6.1	1NO	YC1N-6	
														1NC	YC1N-6B	

Timers

**Selection by Amp Rating (DC Coil)**

	Rated Power (A) per AC3 IEC 60947-4-1							Rated Power (A) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase					1-Phase		3-Phase						
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
	8	7	7.5	7	6.5/6	5	4	-	-	7.5	6.8	4.8	3.9	1NO	YC1K-5	+ D24: 24V DC D110: 110V DC
														1NC	YC1K-5B	
	10.5	10	10.1	9	8.5/8	6.5	5	-	-	11	9.6	7.6	6.1	1NO	YC1K-6	
														1NC	YC1K-6B	

Contactors

**Selection by Kilowatt Rating (AC Coil)**

	Rated Power (kW) per AC3 IEC 60947-4-1							Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase							
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V			
	0.37	0.75	1.5	3	3	3	3	1NO	YC1N-5	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
								1NC	YC1N-5B	
	0.55	1.1	2.2	4	4	4	4	1NO	YC1N-6	
								1NC	YC1N-6B	


Terminal Blocks



**Selection by Kilowatt Rating (DC Coil)**

	Rated Power (kW) per AC3 IEC 60947-4-1							Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase							
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V			
	0.37	0.75	1.5	3	3	3	3	1NO	YC1K-5	+ D24: 24V DC D110: 110V DC
								1NC	YC1K-5B	
	0.55	1.1	2.2	4	4	4	4	1NO	YC1K-6	
								1NC	YC1K-6B	

Circuit Breakers

Accessories

Description	Current Range	Part Number
Overload Relay 	0.1-0.16A	YC9Z-RHU5AP16
	0.16-0.25A	YC9Z-RHU5AP25
	0.25-0.4A	YC9Z-RHU5AP4
	0.35-0.5A	YC9Z-RHU5AP5
	0.45-0.63A	YC9Z-RHU5AP63
	0.55-0.8A	YC9Z-RHU5AP8
	0.75-1A	YC9Z-RHU5A1P0
	0.9-1.3A	YC9Z-RHU5A1P3
	1.1-1.6A	YC9Z-RHU5A1P6
	1.4-2A	YC9Z-RHU5A2P0
	1.8-2.5A	YC9Z-RHU5A2P5
	2.3-3.2A	YC9Z-RHU5A3P2
	2.9-4A	YC9Z-RHU5A4P0
	3.5-4.8A	YC9Z-RHU5A4P8
	4.5-6.3A	YC9Z-RHU5A6P3
	5.5-7.5A	YC9Z-RHU5A7P5
	7.2-10A	YC9Z-RHU5A10P
	9-12.5A	YC9Z-RHU5A12P

Description	Form A (NO)	Form B (NC)	Part Number
Top Mount Auxiliary Contact 	–	2 NC	YC9Z-CNA202M
	–	4 NC	YC9Z-CNA404M
	1 NO	1 NC	YC9Z-CNA211M
	1 NO	3 NC	YC9Z-CNA413M
	2 NO	–	YC9Z-CNA220M
	2 NO	2 NC	YC9Z-CNA422M
Mechanical Interlock 	–	–	YC9Z-CI6
	–	–	–
Surge Suppressor Unit	120V AC	RC	YC9Z-SS1ES
		VARISTOR	YC9Z-SS2ES
	240V AC	RC	YC9Z-SS1HS
		VARISTOR	YC9Z-SS2HS

Specifications

General Specifications

	YC1N-5/6	YC1K-5/6
Contact Configuration	3A1a or 3A1b	
Making Capacity (A)	10xIe	
Breaking Capacity (A)	8xIe	
Switching Frequency (Operations/Hr)	1,200	
Electrical Life (Operations)	1,000,000	
Mechanical Life (Operations)	5,000,000	
Operating Temperature	-20°C ~ 55°C	
Storage Temperature	-40°C ~ 70°C	
Weight (Kg)	0.18	0.23

Note: Ie = rated operational current

Auxiliary Contacts Specifications

		YC1N-5/6	YC1K-5/6
Insulation Voltage, Ui (V)		IEC /UL: 600/600	
Operational Voltage, Ue (V)		IEC /UL: 600/600	
Thermal Current, I <sub>th</sub> (A)		AC: 10 DC: 2.5	
Operational Current (A) IEC 60947-5-1 UL 508	AC-15 A600	120V	6
		240V	3
		380V	1.9
		480V	1.5
	DC-13 Q300	500V	1.4
		600V	1.2
		125V	0.55
		250V	0.27

Main Pole Contact Specifications

	YC1N-5/6	YC1K-5/6
Insulation Voltage, Ui (V)	IEC: 690	UL: 600
Operational Voltage, Ue (V)	IEC: 690	UL: 600
Thermal Current, I <sub>th</sub> (A)	IEC /UL: 20	
Short Circuit Current Rating (KA)	5	
NEMA Size Equivalent (approx.)	00+	

Coil Specifications

		YC1N-5/6	YC1K-5/6
Pick-up Voltage	50/60Hz	75%	75%
Power Consumption, max. (VA)	Inrush	27	–
	Sealed	5	3
Power Dissipation max. (W)		2	3

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

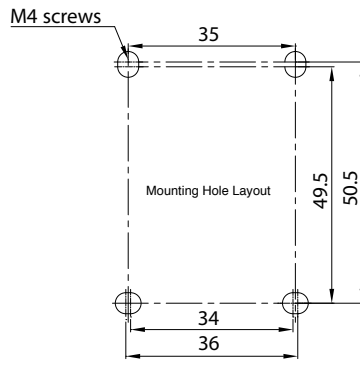
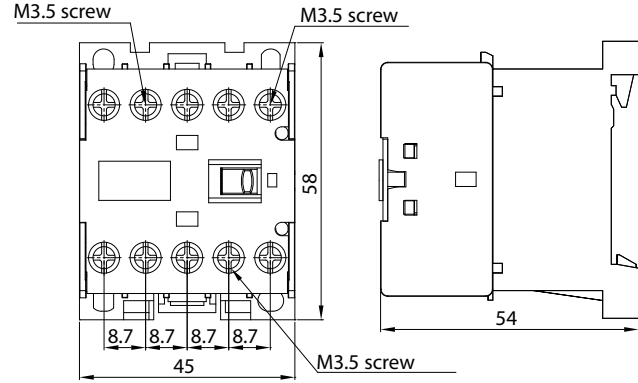
Terminal Blocks

Circuit Breakers

Dimensions (mm)

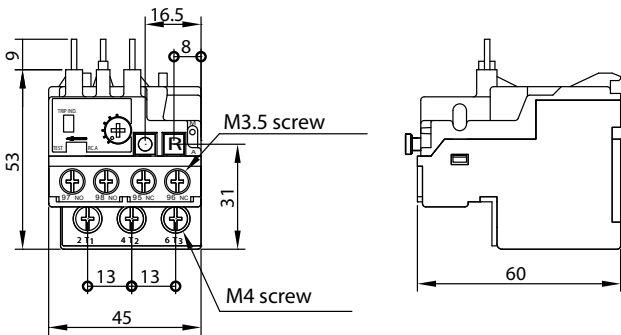
Contactor

YC1N-5/6, YC1K-5/6

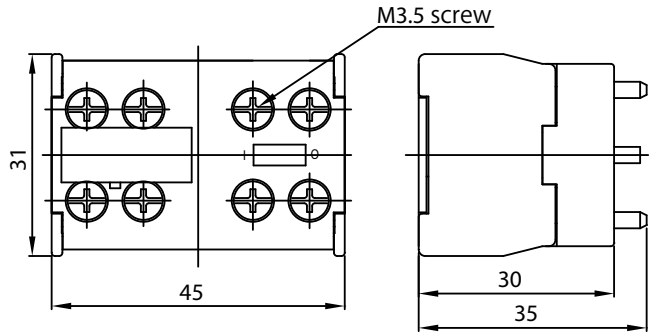


Accessories

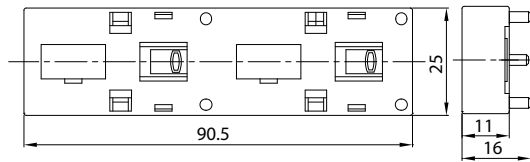
Overload Relay YC9Z-RHU5



Top Mounting Auxiliary Contact YC9Z-CNA

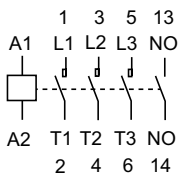


Mechanical Interlock YC9Z-C16

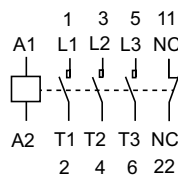


Electrical Diagrams

YC1N-5/6, YC1K-5/6 (1NO Aux.)



YC1N-5/6, YC1K-5/6 (1NC Aux.)



Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

**YC1U Series Contactor (AC Coil)**



**Part Number Key**

YC1U – **9** **B** **A120**

**Contactor Size\***

9, 11, 16, 18, 27, 32, 38, 50, 65, 80

\*see selection table for details

**Coil Voltage**

A24: 24V AC, 50/60Hz  
 A120: 120V AC, 50/60Hz  
 A240: 240V AC, 50/60Hz  
 A480: 480V AC, 50/60Hz

**Auxiliary Contact Arrangement**

Blank: 1NO (size 9 - 16)  
 1NO-1NC (size 18 - 38)  
 2NO-2NC (size 50 - 80)  
 B: 1NC (size 9 - 16 only)

**Part Numbers**

**Selection by Horsepower Rating**

	Rated Power (Hp) per AC3 IEC 60947-4-1							Rated Power (Hp) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	1-Phase		3-Phase					1-Phase		3-Phase						
	110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
	0.75	1.5	3.5	5.5	5.5	5.5	5.5	0.75	2	3	3	5	7.5	1NO	YC1U-9	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
	0.75	1.5	4	7.5	7.5	7.5	7.5	1	2	5	5	7.5	10	1NC	YC1U-9B	
	1	2	5.5	10	10	10	10	1.5	3	5	5	10	10	1NO	YC1U-11	
														1NC	YC1U-11B	
	1	2	5.5	10	10	10	10	1.5	3	5	5	10	10	1NO	YC1U-16	
														1NC	YC1U-16B	
	1.5	3	7.5	15	15	15	15	2	3	7.5	7.5	15	15	1NO-1NC	YC1U-18	
	2	4	10	20	20	20	20	2	5	7.5	10	20	20	1NO-1NC	YC1U-27	
	2	5	12	20	20	25	25	3	5	10	15	25	30	1NO-1NC	YC1U-32	
	3	7	15	25	30	30	30	3	7.5	10	15	30	30	1NO-1NC	YC1U-38	
	4	8	20	35	35/40	40	40	5	10	15	20	40	50	2NO-2NC	YC1U-50	
	4	8	25	40	45/50	50	50	5	15	20	25	50	60	2NO-2NC	YC1U-65	
	5.5	10	30	50	54	60	60	7.5	15	25	30	60	60	2NO-2NC	YC1U-80	

Switches & Pilot Lights

**Selection by Amp Rating**

Rated Power (A) per AC3 IEC 60947-4-1							Rated Power (A) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers
1-Phase		3-Phase					1-Phase		3-Phase					
110V	220V	220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V		
10.5	10.5	11.5	11	10/9	8	6	13.8	12	12	9.6	7.6	9	1NO	YC1U-9
													1NC	YC1U-9B
10.5	10.5	12	12	11	9	7	16	12	18	15.2	11	11	1NO	YC1U-11
													1NC	YC1U-11B
13.5	14	16	16	15	13	10	20	17	18	15.2	14	11	1NO	YC1U-16
													1NC	YC1U-16B
19.5	20.5	23	22	21	19	14	24	17	26	22	21	17	1NO-1NC	YC1U-18
30	30	30	30	28/27	26	21/20	24	28	25.3	28	27	22	1NO-1NC	YC1U-27
35	35	35	32	32	30	23/22	34	28	32.2	42	34	32	1NO-1NC	YC1U-32
39	39	39	38	38	33	25.2/24.2	34	40	32.2	42	40	32	1NO-1NC	YC1U-38
48	48	55	55	52	45	35	56	50	49	54	52	52	2NO-2NC	YC1U-50
50	50	65	64	64	55	45	56	68	63	68	65	62	2NO-2NC	YC1U-65
60	60	75	72	72/70	65	60	80	68	79	80	77	62	2NO-2NC	YC1U-80

+

Coil Voltage
A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC

Relays & Sockets

**Selection by Kilowatt Rating**

Rated Power (kW) per AC3 IEC 60947-4-1							Auxiliary Contact	Part Numbers
1-Phase		3-Phase						
110V	220V	220/240V	380/400V	415/440V	500V	660/690V		
0.55	1.1	2.5	4	4	4	4	1NO	YC1U-9
							1NC	YC1U-9B
0.55	1.1	3	5.5	5.5	5.5	5.5	1NO	YC1U-11
							1NC	YC1U-11B
0.75	1.5	4	7.5	7.5	7.5	7.5	1NO	YC1U-16
							1NC	YC1U-16B
1.1	2.2	5.5	11	11	11	11	1NO-1NC	YC1U-18
1.5	3	7.5	15	15	15	15	1NO-1NC	YC1U-27
1.5	3.7	9	15	15	18.5	18.5	1NO-1NC	YC1U-32
2.2	5	11	18.5	22	22	22	1NO-1NC	YC1U-38
3	6	15	25	25/30	30	30	2NO-2NC	YC1U-50
3	6	18.5	30	33/37	37	37	2NO-2NC	YC1U-65
4	7.5	22	37	40	45	45	2NO-2NC	YC1U-80

+

Coil Voltage
A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC


Contactors


Terminal Blocks


Circuit Breakers




Accessories

Item	Contactor Size	Current Range	Part Number	
	9-27	0.1-0.16	YC9Z-RHU10AP16	
		0.16-0.25	YC9Z-RHU10AP25	
		0.25-0.4A	YC9Z-RHU10AP40	
		0.35-0.5A	YC9Z-RHU10AP5	
		0.45-0.63A	YC9Z-RHU10AP63	
		0.55-0.8A	YC9Z-RHU10AP8	
		0.75-1A	YC9Z-RHU10A1P0	
		0.9-1.3A	YC9Z-RHU10A1P3	
		1.1-1.6A	YC9Z-RHU10A1P6	
		1.4-2A	YC9Z-RHU10A2P0	
		1.8-2.5A	YC9Z-RHU10A2P5	
		2.3-3.2A	YC9Z-RHU10A3P2	
		2.9-4A	YC9Z-RHU10A4P0	
		3.5-4.8A	YC9Z-RHU10A4P8	
		4.5-6.3A	YC9Z-RHU10A6P3	
		5.5-7.5A	YC9Z-RHU10A7P5	
		7.2-10A	YC9Z-RHU10A10P	
		9-12.5A	YC9Z-RHU10A12P	
		11.3-16A	YC9Z-RHU10A16P	
		15-20A	YC9Z-RHU10A20P	
		21-25A	YC9Z-RHU10A25P	
		24.5-30A	YC9Z-RHU10A30P	
		27-38	15-20A	YC9Z-RHU10A220
			17.5-21.5A	YC9Z-RHU10A21P
			21-25A	YC9Z-RHU10A225
			24.5-30A	YC9Z-RHU10A230
29-36A	YC9Z-RHU10A36P			
24.5-36A	YC9Z-RHU80A436			
50-80	35-47A	YC9Z-RHU80A447		
	17-25A	YC9Z-RHU80A325		
	24.5-36A	YC9Z-RHU80A336		
	35-47A	YC9Z-RHU80A347		
	45-60A	YC9Z-RHU80A360		
		58-75A	YC9Z-RHU80A75P	
		72-90A	YC9Z-RHU80A90P	

Item	Part Number
	for YC1U-9,11, 16, 18, 27, 32, 38
	YC9Z-CI18
	for YC1U-50, 65, 80
	YC9Z-CI35

Item	Part Number	
	for YC1U-9 thru 38 1NO-1NC (1a1b) YC9Z-CNA111SR	
Surge Suppressor Unit	120V AC	
	RC	YC9Z-SS1E
	VARISTOR	YC9Z-SS2E
	240V AC	
	RC	YC9Z-SS1H
	VARISTOR	YC9Z-SS2H

Item	Form A (NO)	Form B (NC)	Part Number
	-	2NC	YC9Z-CUA202
	1NO	1NC	YC9Z-CUA211
	2NO	-	YC9Z-CUA220
	2NO	2NC	YC9Z-CUA422
	3NO	1NC	YC9Z-CUA431
	4NO	-	YC9Z-CUA440

Item	Size	Coil Voltage	Part Number	
Replacement Coils	9-27	24V AC	YC9Z-LCU22A24*	
		110V AC	YC9Z-LCU22A110	
		120V AC	YC9Z-LCU22A120*	
		208V AC	YC9Z-LCU22A208	
		220V AC	YC9Z-LCU22A220	
		240V AC	YC9Z-LCU22A240*	
		480V AC	YC9Z-LCU22A480*	
		27-38	24V AC	YC9Z-LCU38A24*
			110V AC	YC9Z-LCU38A110
			120V AC	YC9Z-LCU38A120*
			208V AC	YC9Z-LCU38A208
			220V AC	YC9Z-LCU38A220
	240V AC		YC9Z-LCU38A240*	
	480V AC		YC9Z-LCU38A480*	
	50-80		24V AC	YC9Z-LCU80A24*
			110V AC	YC9Z-LCU80A110
			120V AC	YC9Z-LCU80A120*
			208V AC	YC9Z-LCU80A208
			220V AC	YC9Z-LCU80A220
		240V AC	YC9Z-LCU80A240*	
		480V AC	YC9Z-LCU80A480*	

\* Standard stock coil voltages.

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Specifications

General Specifications

	YC1U-9	YC1U-11	YC1U-16	YC1U-18	YC1U-27	YC1U-32	YC1U-38	YC1U-50	YC1U-65	YC1U-80
Contact Configuration	3A1a, 3A1b		3A1a1b		3A1a1b			3A2a2b		
Making Capacity (A)	10xIe		10xIe		10xIe			10xIe		
Breaking Capacity (A)	8xIe		8xIe		8xIe			8xIe		
Switching Frequency (Operations/ Hr)	1200		1200		1200			1200		
Electrical Life (Operations)	1,000,000		1,000,000		1,000,000			500,000	1,000,000	1,000,000
Mechanical Life (Operations)	5,000,000		5,000,000		5,000,000			5,000,000		
Operating Temperature	-20°C ~ 55°C									
Storage Temperature	-40°C ~ 70°C									
Weight (Kg)	0.3		0.4		0.7			1.3		

Note: Ie = rated operational current

Main Pole Contact Specifications

	YC1U-9	YC1U-11	YC1U-16	YC1U-18	YC1U-27	YC1U-32	YC1U-38	YC1U-50	YC1U-65	YC1U-80
Insulation Voltage, Ui (V)	IEC: 660 UL: 600		IEC: 660 UL: 600		IEC: 1000 UL: 600			IEC: 660 UL: 600		
Operational Voltage, Ue (V)	IEC: 660 UL: 600		IEC: 660 UL: 600		IEC: 690 UL: 600			IEC: 660 UL: 600		
Thermal Current, I <sub>th</sub> (A)	IEC: 25 UL: 24		IEC: 32 UL: 35		IEC: 50 UL: 45	IEC: 60 UL: 50	IEC: 60 UL: 55	IEC: 70 UL: 72	IEC: 80/100 UL: 85	IEC: 100 UL: 104
Short Circuit Current Rating (KA)	5		5		5			10		
NEMA Size Equivalent (approx.)	0	0+	0+	1+	1	2	2	2+	2+	3+

Auxiliary Contacts Specifications

	YC1U-9	YC1U-11	YC1U-16	YC1U-18	YC1U-27	YC1U-32	YC1U-38	YC1U-50	YC1U-65	YC1U-80	
Contact Configuration	1a or 1b		1a1b		1a1b			1a1b			
Insulation Voltage, Ui (V)	IEC: 600 UL: 600		IEC: 660 UL: 600		IEC: 690 UL: 600			IEC: 660 UL: 600			
Operational Voltage, Ue (V)	IEC: 600 UL: 600		IEC: 600 UL: 600		IEC: 690 UL: 600			IEC: 660 UL: 600			
Thermal Current, I <sub>th</sub> (A)	AC: 10 DC: 2.5										
Contact Rating Code Designation UL	A600 Q300										
Operational Current (A) IEC 60947-5-1 UL 508	AC-15 A600	120V				6					
		240V				3					
		380V				1.9					
		480V				1.5					
		500V				1.4					
		600V				1.2					
	DC-13 Q300	125V				0.55					
		250V				0.27					

Coil Specifications

	YC1U-9	YC1U-11	YC1U-16	YC1U-18	YC1U-27	YC1U-32	YC1U-38	YC1U-50	YC1U-65	YC1U-80
Pick-up Voltage	50-60Hz	70%		75%	75%			75%		
Power Consumption, max. (VA)	Inrush	70		70	150 (cos φ = 0.7)			280		
	Sealed	12		12	15 (cos φ = 0.3)			32		
Power Dissipation max. (W)	2-4		2-4		5			6-7.5		

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

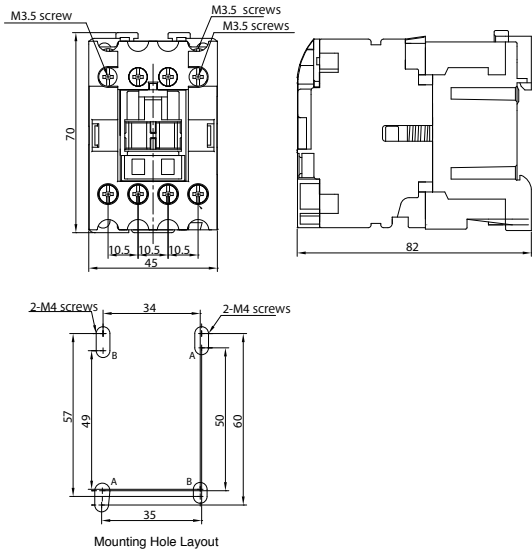
Terminal Blocks

Circuit Breakers

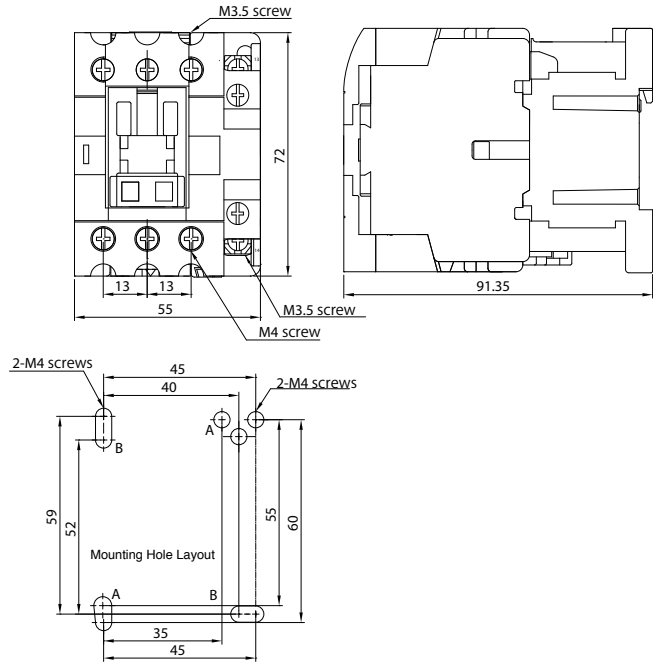
Dimensions (mm)

Contactors

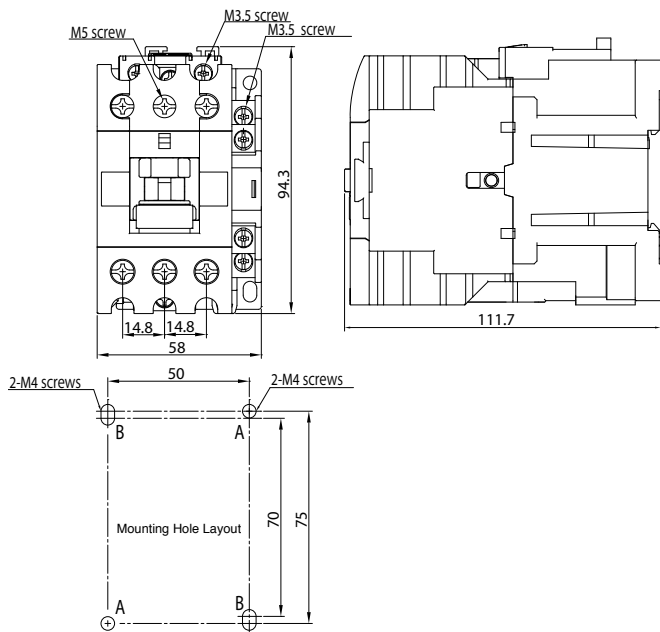
YC1U-9, YC1U-11, YC1U-16



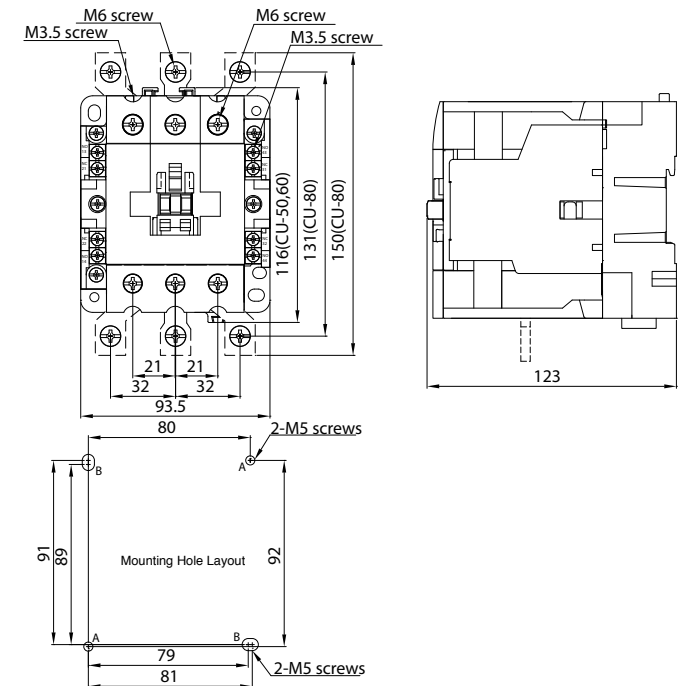
YC1U-18



YC1U-27, YC1U-32, YC1U-38



YC1U-50, YC1U-65, YC1U-80



Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

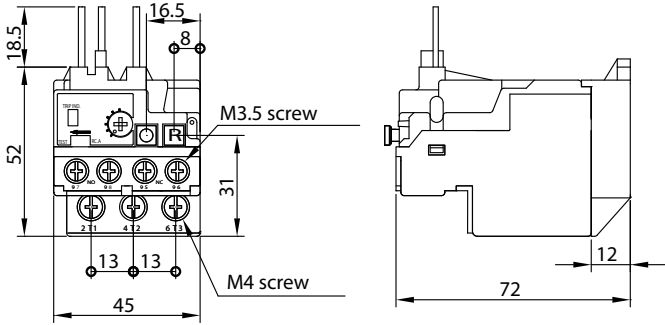
Terminal Blocks

Circuit Breakers

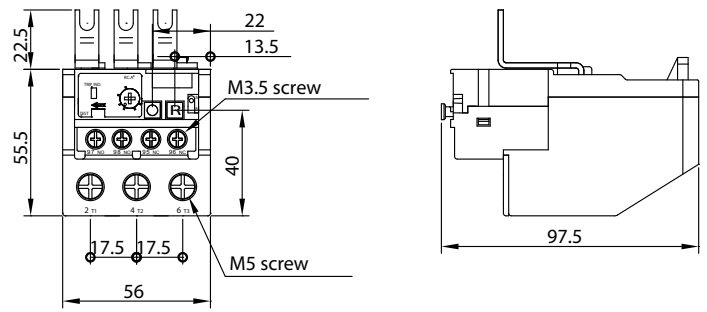
Dimensions (mm)

Overload Relays

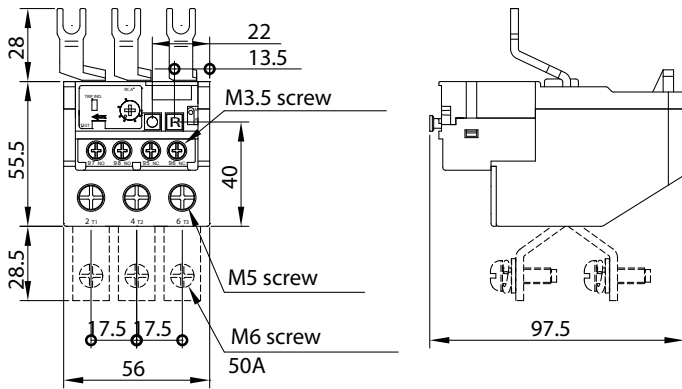
YC9Z-RHU10 (for YC1U-9, 11, 16, 18)



YC9Z-RHU10 (for YC1U-27, 32, 38, 40)

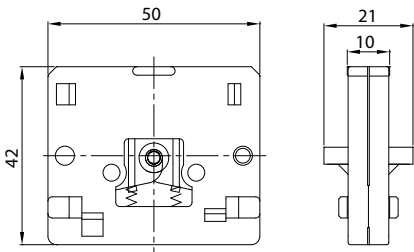


YC9Z-RHU80 (for YC1U-50, 65, 80)

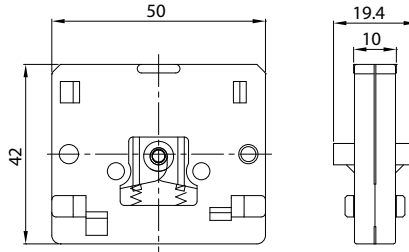


Mechanical Interlocks

YC9Z-CI18 (for YC1U-9, 11, 16, 27, 32, 38)



YC9Z-CI135 (for YC1U-50, 65, 80)



Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

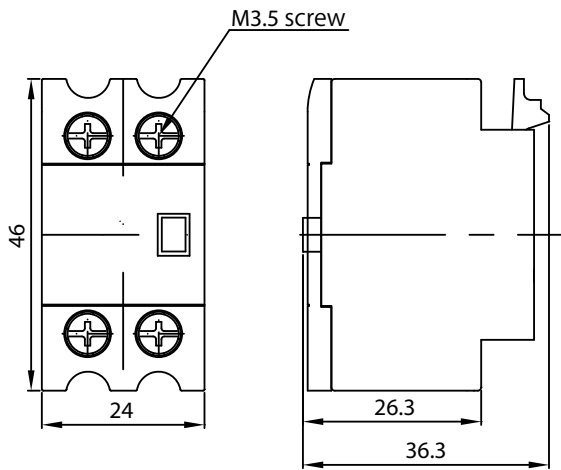
Contactors

Terminal Blocks

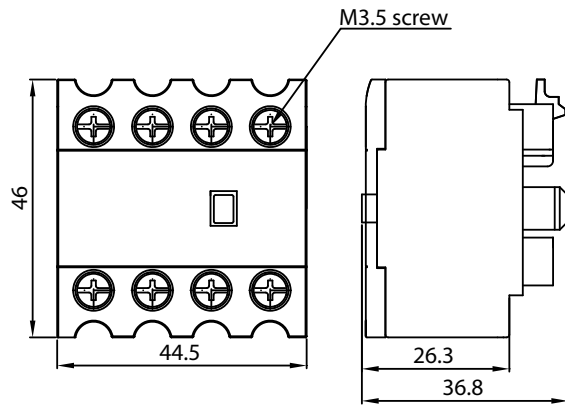
Circuit Breakers

Top Mounting Auxiliary Contacts

YC9Z-CUA2

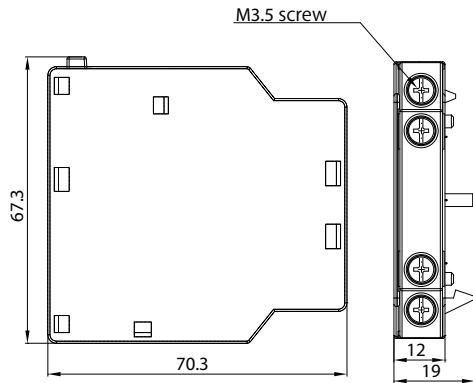


YC9Z-CUA4



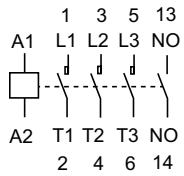
Side Mounting Auxiliary Contact

YC9Z-CNA111SR (1a1b for YC1U-9 to YC1U-38)

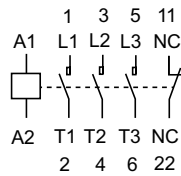


Electrical Diagrams

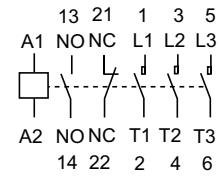
YC1U-9/11/16 (1NO Aux.)



YC1U-9/11/16 (1NC Aux.)



YC1U-18 to YC1U-38 (1NO-1NC Aux.)



YC1N Series Contactors (AC Coil)



Part Number Key

YC1N - 125 A120




**Contactor Size\***  
100, 125, 150, 180, 220, 300

**Coil Voltage**  
A24: 24V AC, 50/60Hz  
A120: 120V AC, 50/6-Hz  
A240: 240V AC, 50/60Hz  
A480: 480V AC, 50/60Hz

\*see selection table for details

Part Numbers

Selection by Horsepower Rating

	Rated Power (Hp) per AC3 IEC 60947-4-1					Rated Power (Hp) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
	3-Phase					1-Phase		3-Phase						
	220/ 240V	380/ 400V	415/ 440V	500V	660/ 690V	110/ 120V	220/ 240V	200/ 208V	230/ 240V	440/ 480V	575V			
	40	80	80	85	85	10	15	30	40	75	100	2NO-2NC	YC1N-100	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
	54	100	100	100	100	-	-	40	50	100	100		YC1N-125	
	60	110	110	125	136	-	-	50	75	125	125		YC1N-150	
	75	125	136	150	150	-	-	60	75	150	150		YC1N-180	
	85	160	170	180	180	-	-	75	100	200	200		YC1N-220	
	120	220	220	220	270	-	-	100	125	250	250		YC1N-300	

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Selection by Amp Rating

Rated Power (A) per AC3 IEC 60947-4-1					Rated Power (A) per UL508 CSA C22.2						Auxiliary Contact	Part Numbers	Coil Voltage
3-Phase					1-Phase		3-Phase						
220/240V	380/400V	415/440V	500V	660/690V	110/120V	220/240V	200/208V	230/240V	440/480V	575V			
115	115	105	93	75	100	68	92	104	96	99	2NO-2NC	YC1N-100	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
138	138	138	105	85	-	-	120	130	124	99		YC1N-125	
150	147	138	129	107	-	-	150	154	156	125		YC1N-150	
182	179	182	156	118	-	-	177	192	180	144		YC1N-180	
225	225	220	190	140	-	-	221	248	240	192		YC1N-220	
300	300	300	250	220	-	-	285	312	302	242		YC1N-300	

Selection by Kilowatt Rating

Rated Power (kW) per AC3 IEC 60947-4-1					Auxiliary Contact	Part Numbers	Coil Voltage
3-Phase							
220/240V	380/400V	415/440V	500V	660/690V			
30	60	60	65	65	2NO-2NC	YC1N-100	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
40	75	75	75	75		YC1N-125	
45	80	80	90	100		YC1N-150	
55	95	100	110	110		YC1N-180	
65	120	132	132	132		YC1N-220	
90	160	160	160	220		YC1N-300	

Accessories

Item	Size	Current Range	Part Number
Overload Relay	100, 125	65-95A	YC9Z-RHN100A95P
		85-125A	YC9Z-RHN100A125
		110-160A	YC9Z-RHN100A160
	150	65-95A	YC9Z-RHN150A95P
		85-125A	YC9Z-RHN150A125
		110-160A	YC9Z-RHN150A160
	180	110-160A	YC9Z-RHN180A160
		125-185A	YC9Z-RHN180A185
	220, 300	110-160A	YC9Z-RHN220A160
		125-185A	YC9Z-RHN220A185

Item	Part Number		
Mechanical Interlock 	YC9Z-CI100		
Side Mount Auxiliary Contact 	1a1b YC9Z-CNA111BC		
Surge Suppressor Unit	120V AC	RC	YC9Z-SS1E
		VARISTOR	YC9Z-SS2E
	240V AC	RC	YC9Z-SS2H
		VARISTOR	YC9Z-SS1H

Item	Contactor Size	Coil Voltage	Part Number	
Replacement Coils	100, 125	24VAC	YC9Z-LCN125A24*	
		110VAC	YC9Z-LCN125A110	
		120VAC	YC9Z-LCN125A120*	
		208VAC	YC9Z-LCN125A208	
		220VAC	YC9Z-LCN125A220	
		240VAC	YC9Z-LCN125A240*	
		480VAC	YC9Z-LCN125A480*	
		150, 180	24VAC	YC9Z-LCN180A24*
			110VAC	YC9Z-LCN180A110
			120VAC	YC9Z-LCN180A120*
			208VAC	YC9Z-LCN180A208
			220VAC	YC9Z-LCN180A220
	240VAC		YC9Z-LCN180A240*	
	480VAC		YC9Z-LCN180A480*	
	220, 300		24VAC	YC9Z-LCN300A24*
			110VAC	YC9Z-LCN300A110
			120VAC	YC9Z-LCN300A120*
			208VAC	YC9Z-LCN300A208
			220VAC	YC9Z-LCN300A220
		240VAC	YC9Z-LCN300A240*	
		480VAC	YC9Z-LCN300A480*	

\* Standard stock coil voltages.

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Specifications

General Specifications

	YC1N-100	YC1N-125	YC1N-150	YC1N-180	YC1N-220	YC1N-300
Contact Configuration	3A2a2b					
Making Capacity (A)	10xIe					
Breaking Capacity (A)	8xIe					
Switching Frequency (Operations/ Hr)	1,200					
Electrical Life (Operations)	1,000,000					
Mechanical Life (Operations)	5,000,000					
Operating Temperature	-20°C ~ 55°C					
Storage Temperature	-40°C ~ 70°C					
Weight (Kg)	2.2		4.1		6.7	

Note: Ie = rated operational current

Main Pole Contact Specifications

	YC1N-100	YC1N-125	YC1N-150	YC1N-180	YC1N-220	YC1N-300
Insulation Voltage, Ui (V)	IEC: 1000 UL: 600		IEC: 1000 UL:600		IEC: 1000 UL:600	
Operational Voltage, Ue (V)	IEC: 690 UL:600		IEC: 690 UL:600		IEC: 690 UL:600	
Thermal Current, I <sub>th</sub> (A)	IEC: 135 UL: 130	IEC/UL: 150	IEC/UL: 200	IEC/UL: 240	IEC/UL: 260	IEC/UL: 350
Short Circuit Current Rating (KA)	10		10		18	
NEMA Size Equivalent (approx.)	3	4	4	4	4	5

Auxiliary Contacts Specifications

	YC1N-100	YC1N-125	YC1N-150	YC1N-180	YC1N-220	YC1N-300
Insulation Voltage, Ui (V)	IEC: 690 UL:600					
Operational Voltage, Ue (V)	IEC: 690 UL: 600					
Thermal Current, I <sub>th</sub> (A)	AC: 10 DC: 2.5					
Contact Rating Code Designator UL	A600 Q300					
Operational Current (A) IEC 60947-5-1 UL 508	AC-15 A600	120V	6			
		240V	3			
		380V	1.9			
		480V	1.5			
		500V	1.4			
		600V	1.2			
	DC-13 Q300	125V	0.55			
		250V	0.27			

Coil Specifications

		YC1N-100/YC1N-125	YC1N-150/YC1N-180	YC1N-220/YC1N-300
Pick-up Voltage	50/60Hz	75%	75%	75%
Drop-out Voltage		60%	45%	45%
Power Consumption, max. (VA)	Inrush	560	700	300
	Sealed	63	88	63
Power Dissipation max. (W)		6-11.6	25-35	9-15

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

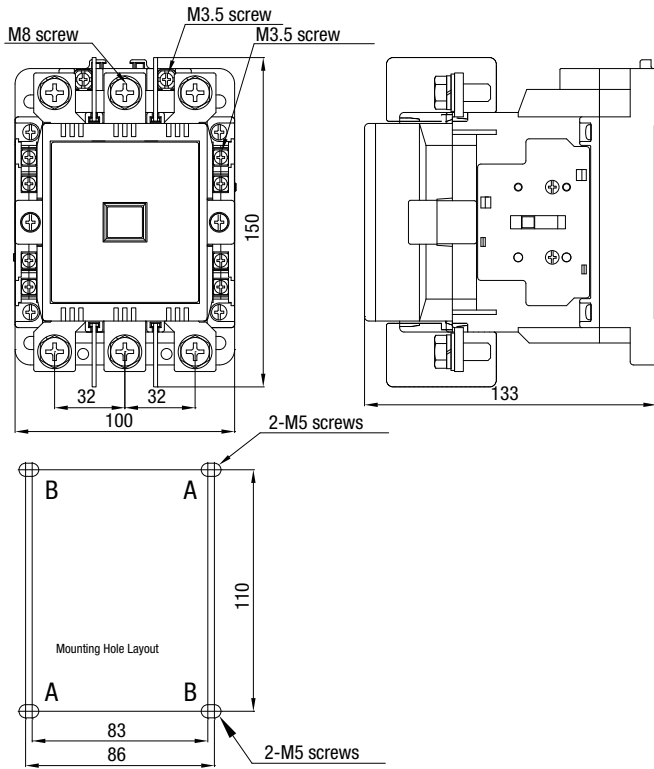
Circuit Breakers



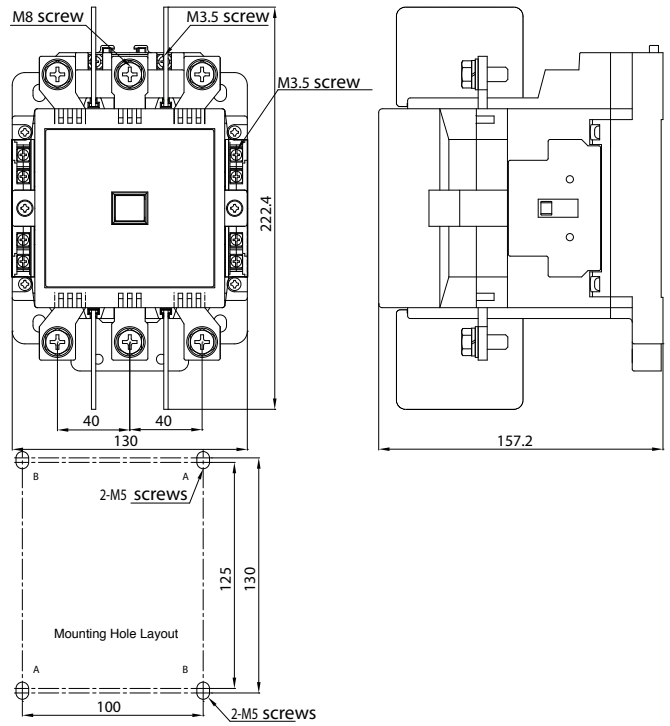
Dimensions (mm)

Contactors

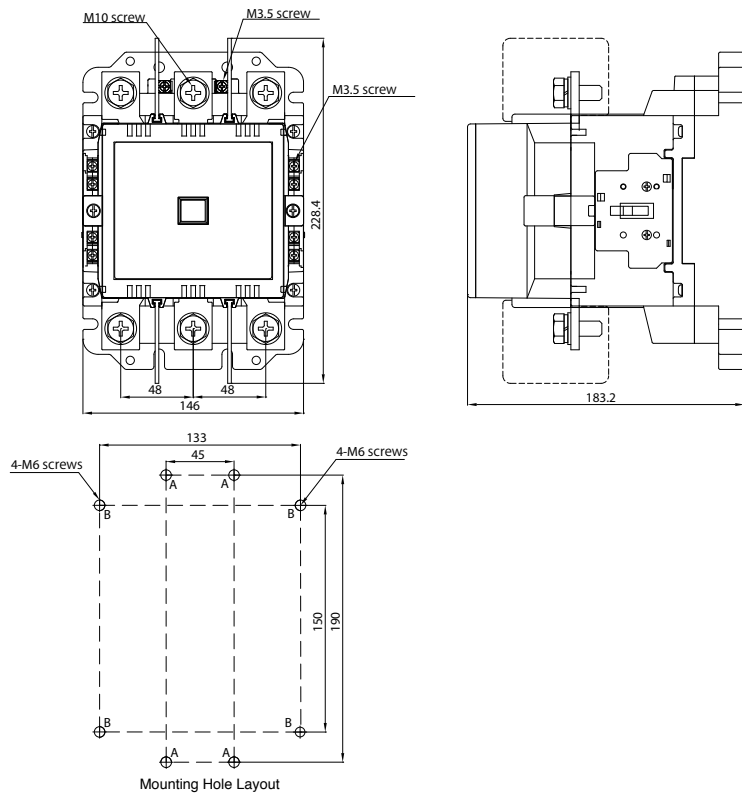
YC1N-100, YC1N-125



YC1N-150, YC1N-180



YC1N-220, YC1N-300



Switches & Pilot Lights  
 Signaling Lights  
 Relays & Sockets  
 Timers

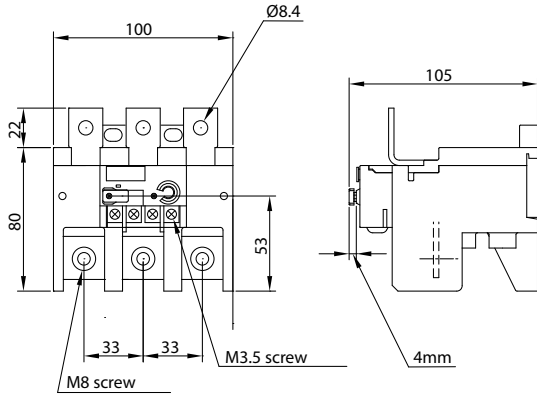
Contactors

Terminal Blocks

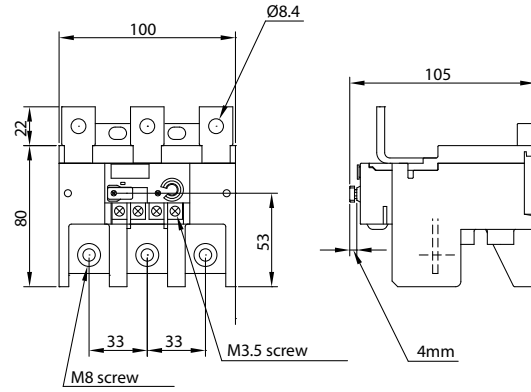
Circuit Breakers

Dimensions (mm)

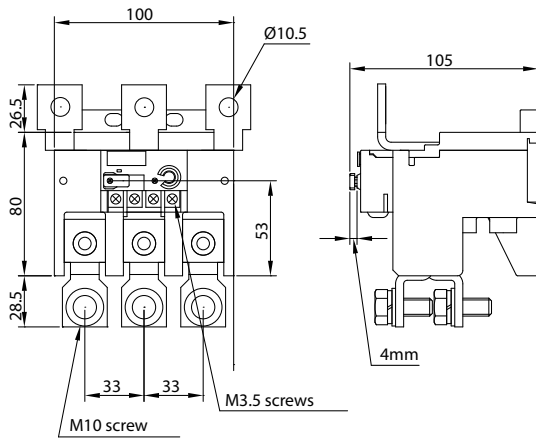
Overload Relay  
YC9Z-RHN100



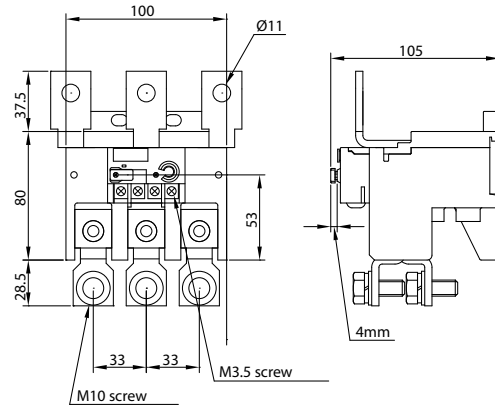
YC9Z-RHN150



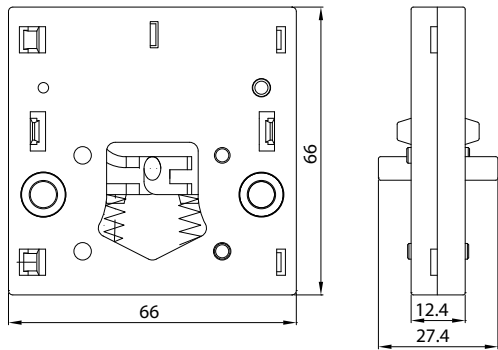
YC9Z-RHN180



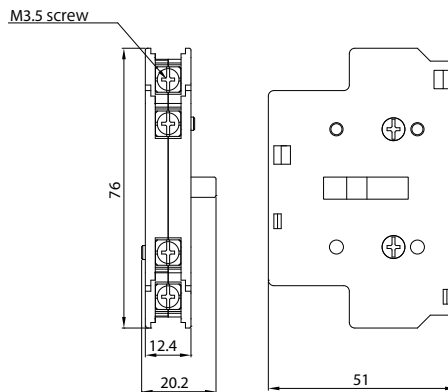
YC9Z-RHN220



Mechanical Interlock YC9Z-CI100



Side Mounting Auxiliary Contact YC9Z-CNA11BC (1a1b)



Electrical Diagram

YC1N-100 to YC1N-300



Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers