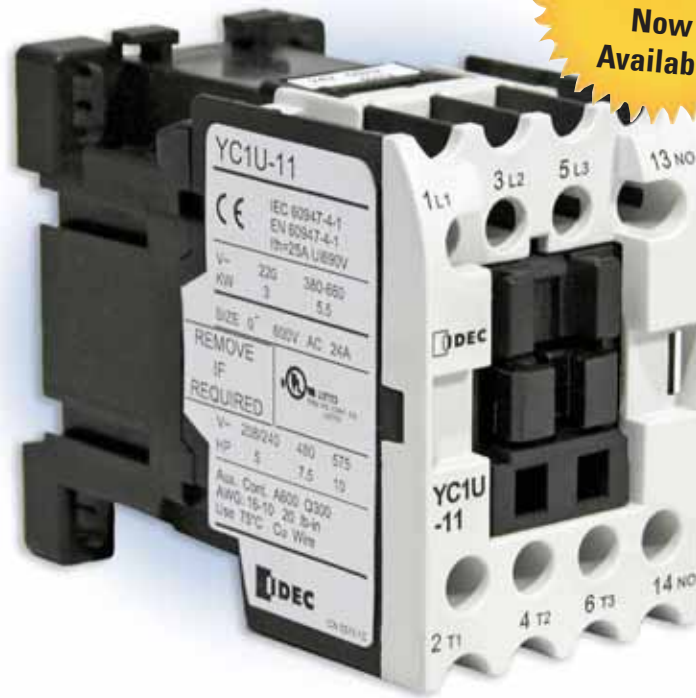




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# **IDEC** YC Contactors

**Table of Contents**

Selection Guide.....2

YC1N(K) Mini Contactors .....3  
 Part Numbers .....3  
 Accessories .....5  
 Specifications.....5  
 Dimensions .....6  
 Electrical Diagrams .....6





YC1U Series Contactor (AC Coil).....7  
 Part Numbers .....7  
 Accessories .....9  
 Specifications.....10  
 Dimensions .....11  
 Electrical Diagrams .....13

YC1N Series Contactors (AC Coil).....14  
 Part Numbers .....14  
 Accessories .....15  
 Specifications.....16  
 Dimensions .....17  
 Electrical Diagram .....18

YC1A Series Contactors (DC Coil).....19  
 Part Numbers .....19  
 Accessories .....20  
 Specifications.....21  
 Dimensions .....22  
 Electrical Diagram.....23



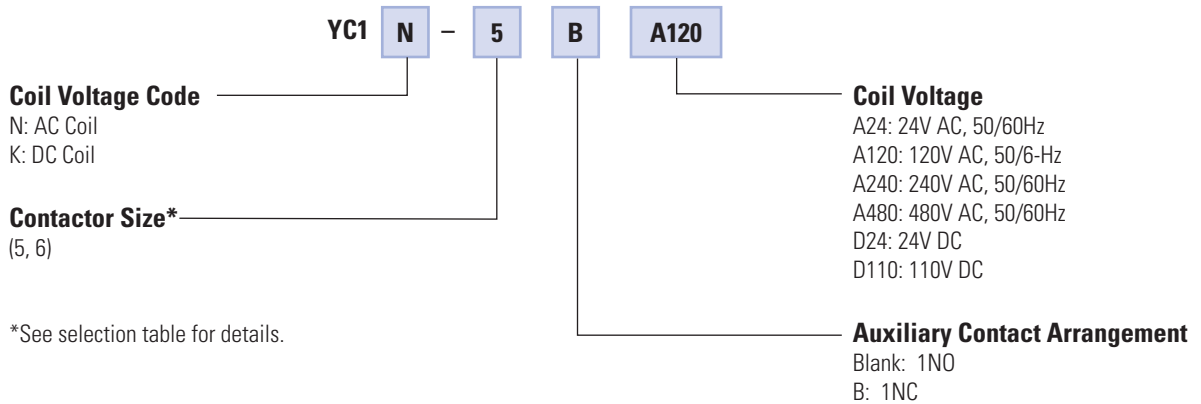
**Selection Guide**

Series	YC1N(K) Mini series	YC1U AC Series	YC1N AC Series	YC1A DC Series
				
<b>Coil Voltage</b>	AC or DC	AC	AC	DC
<b>Amp Range (AC3)</b>	9A & below	9A - 80A	80A - 300A	9A - 65A
<b>Page</b>	3	7	14	19

### 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	

##### 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	

**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	

**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	


**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	

**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	

Accessories

Description	Current Range	Part Number
Overload Relay 	0.3A~0.45A	YC9Z-RHN5AP45
	0.45~0.67A	YC9Z-RHN5AP67
	0.67~1A	YC9Z-RHN5A1P0
	1~1.5A	YC9Z-RHN5A1P5
	1.4~2.1A	YC9Z-RHN5A2P1
	1.8~2.7A	YC9Z-RHN5A2P7
	2.4~3.6A	YC9Z-RHN5A3P6
	3.5~5A	YC9Z-RHN5A5P0
	4~6A	YC9Z-RHN5A6P0
	5.5~8.5A	YC9Z-RHN5A8P5
	8.5~12.5A	YC9Z-RHN5A12P

Description	Form A (NO)	Form A (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
	3 NO	1 NC	YC9Z-CNA431M
	4 NO	–	YC9Z-CNA440M
Mechanical Interlock 			YC9Z-CI6
Surge Suppressor Unit	120V AC	RC Type	YC9Z-SS1ES
		VARISTOR	YC9Z-SS2ES
	240V AC	RC Type	YC9Z-SS1HS
		VARISTOR	YC9Z-SS2HS

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 Endurance (Operations)	1,000,000	
Mechanical Endurance (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

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+	

Specifications

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
		500V	1.4
		600V	1.2
	DC-13 Q300	125V	0.55
		250V	0.27

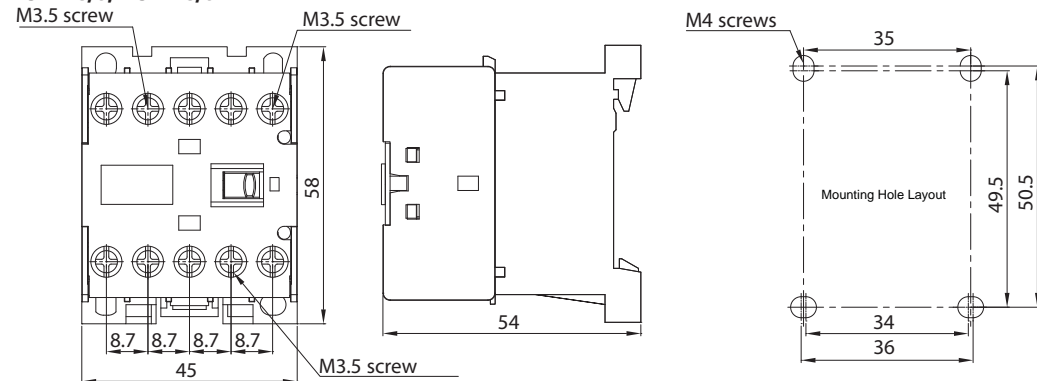
Coil Specifications

		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

Dimensions

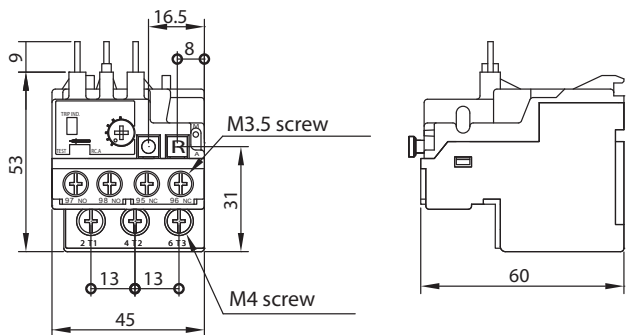
Contactor

YC1N-5/6, YC1K-5/6

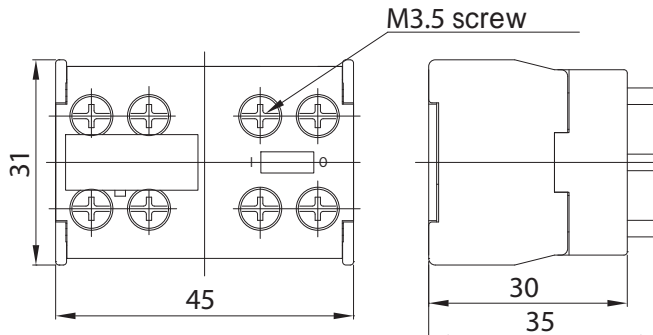


Accessories

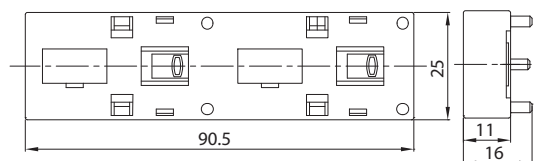
Overload Relay YC9Z-RHN5



Top Mounting Auxiliary Contact YC9Z-CNA

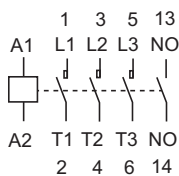


Mechanical Interlock YC9Z-CI6

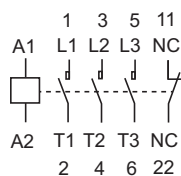


Electrical Diagrams

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



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



All dimensions are in mm.

### 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
														1NC	YC1U-9B	
	0.75	1.5	4	7.5	7.5	7.5	7.5	1	2	5	5	7.5	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	

**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
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	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC	
													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		


**Selection by Kilowatt Rating**


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			
0.55	1.1	2.5	4	4	4	4	1NO	YC1U-9	+ A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
							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	



Accessories

Description	Contactor Size	Current Range	Part Number
 <p>Overload Relay</p>	9~22	0.3~0.45A	YC9Z-RHN10AP45
		0.45~0.67A	YC9Z-RHN10AP67
		0.67~1A	YC9Z-RHN10A1P0
		1~1.5A	YC9Z-RHN10A1P5
		1.4~2.1A	YC9Z-RHN10A2P1
		1.8~2.7A	YC9Z-RHN10A2P7
		2.4~3.6A	YC9Z-RHN10A3P6
		3.5~5A	YC9Z-RHN10A5P0
		4~6A	YC9Z-RHN10A6P0
		5.5~8.5A	YC9Z-RHN10A8P5
		8.5~12.5A	YC9Z-RHN10A12P
		12.5~18A	YC9Z-RHN10A18P
	17~24A	YC9Z-RHN10A24P	
	22~30A	YC9Z-RHN10A30P	
	27~38	17~25A	YC9Z-RHN27A25P
		23~32A	YC9Z-RHN27A32P
		30~40A	YC9Z-RHN27A40P
		37~50A	YC9Z-RHN27A50P
	50~80	17~25A	YC9Z-RHN50A25P
		23~32A	YC9Z-RHN50A32P
30~40A		YC9Z-RHN50A40P	
37~50A		YC9Z-RHN50A50P	
48~65A		YC9Z-RHN50A65P	
63~80A		YC9Z-RHN50A80P	
		77~97A	YC9Z-RHN50A97P

Description	Form A (NO)	Form A (NC)	Part Number
 <p>Top Mount Auxiliary Contact</p>	—	2NC	YC9Z-CUA202
	1NO	1NC	YC9Z-CUA211
	2NO	—	YC9Z-CUA220
	2NO	2NC	YC9Z-CUA422
	3NO	1NC	YC9Z-CUA431
	4NO	—	YC9Z-CUA440

Description	Size	Coil Voltage	Part Number
 <p>Replacement Coils</p>	9~22	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
	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
		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.

Description	Part Number		
 <p>Mechanical Interlock</p>	for YC1U-9,11, 16, 18, 22, 27, 32, 38	YC9Z-CI18	
	for YC1U-40, 50, 65, 80	YC9Z-CI35	
 <p>Side Mount Auxiliary Contact</p>	for YC1U-9 thru 40 1NO-1NC (1a1b)		
	YC9Z-CNA111SR		
Surge Suppressor Unit	120V AC	RC Type	YC9Z-SS1E
		VARISTOR	YC9Z-SS2E
	240V AC	RC Type	YC9Z-SS1H
		VARISTOR	YC9Z-SS2H

## 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 Endurance (Operations)	1,000,000		1,000,000		1,000,000			500,000	1,000,000	1,000,000
Mechanical Endurance (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 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					

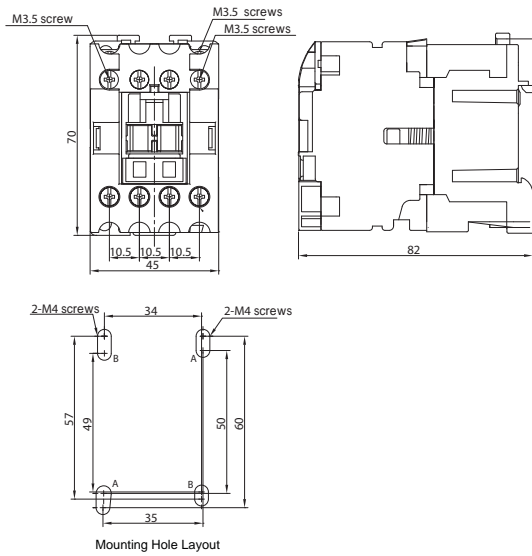
### Coil Specifications

	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		

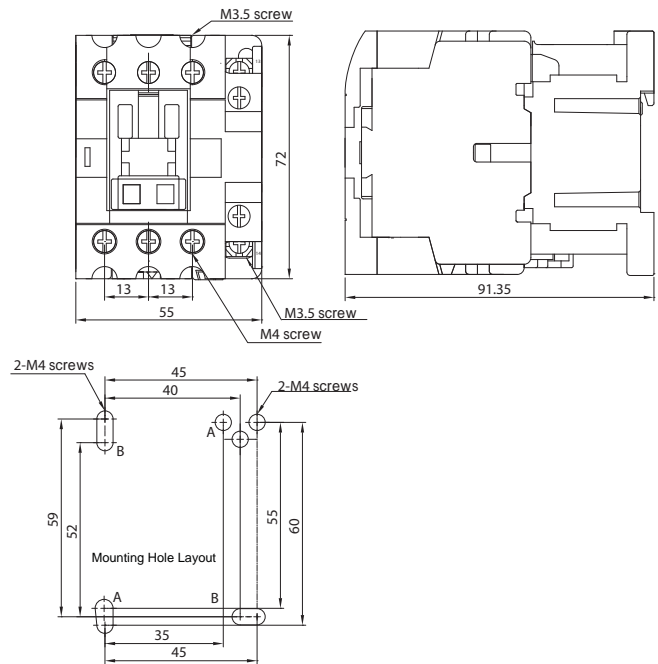
Dimensions

Contactors

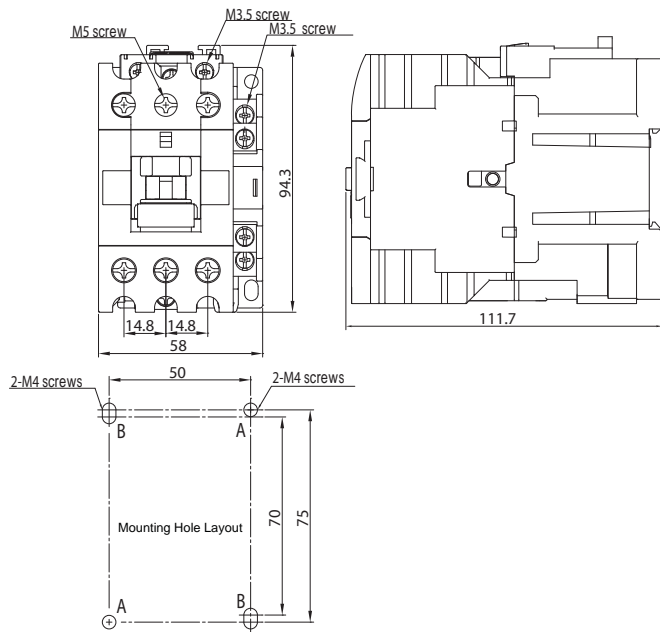
YC1U-9, YC1U-11, YC1U-16



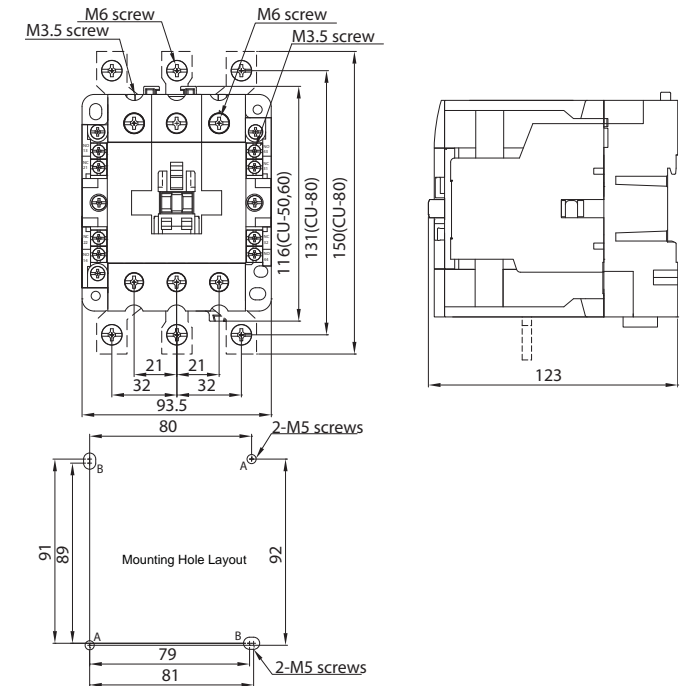
YC1U-18



YC1U-27, YC1U-32, YC1U-38



YC1U-50, YC1U-65, YC1U-80

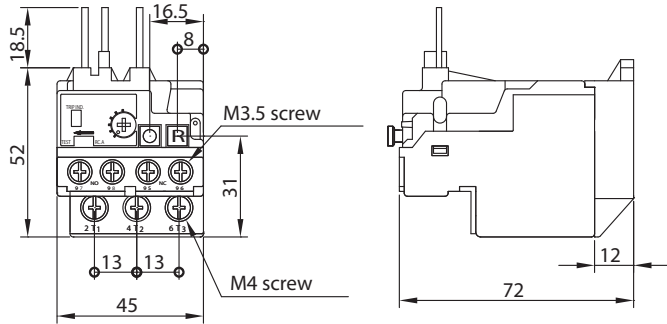


All dimensions are in mm.

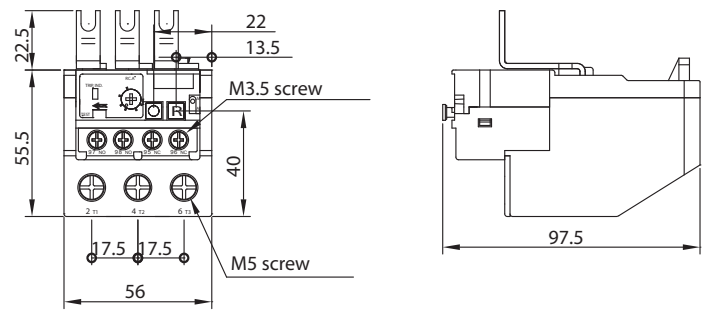
**Accessories**

**Overload Relays**

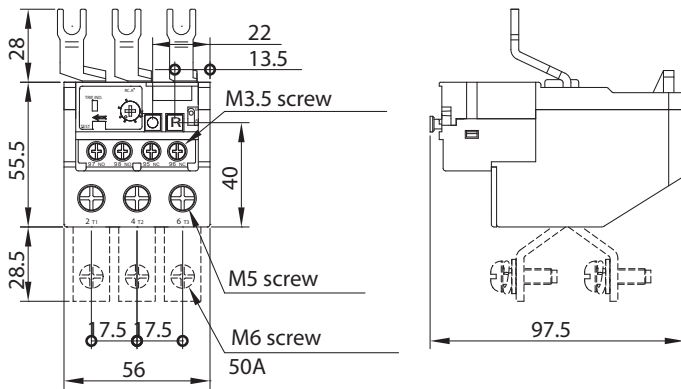
**YZ9Z-RHN10 (for YC1U-9, 11, 16, 18)**



**YZ9Z-RHN27 (for YC1U-27, 32, 38, 40)**

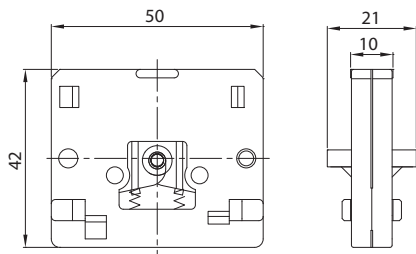


**YZ9Z-RHN50 (for YC1U-50, 65, 80)**

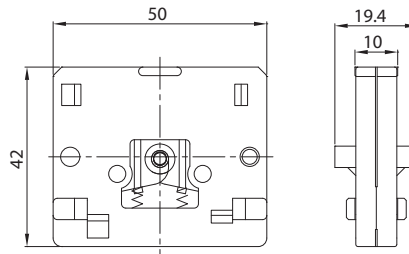


**Mechanical Interlocks**

**YZ9Z-CI18 (for YC1U-9, 11, 16, 27, 32, 38)**



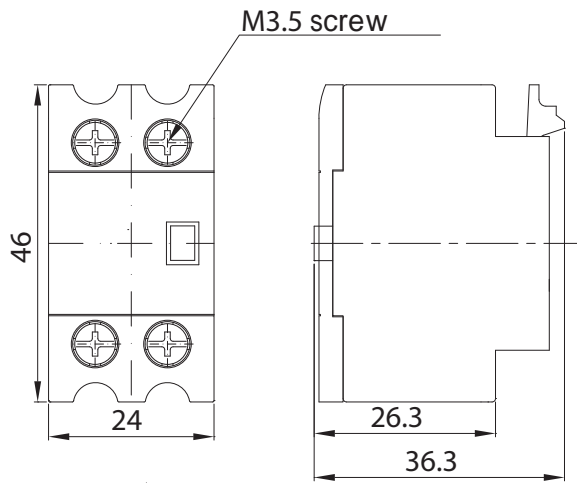
**YZ9Z-CI135 (for YC1U-40, 50, 65, 80)**



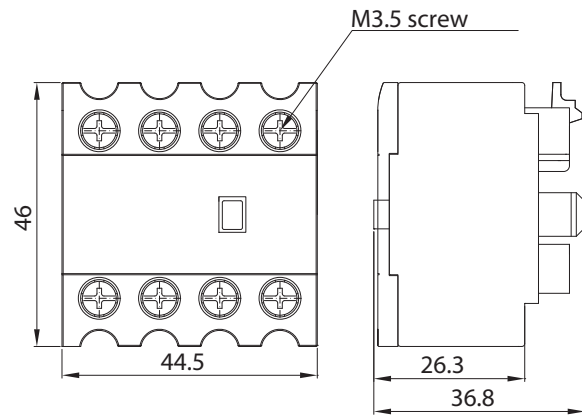
All dimensions are in mm.

**Top Mounting Auxiliary Contacts**

**YC9Z-CUA2**

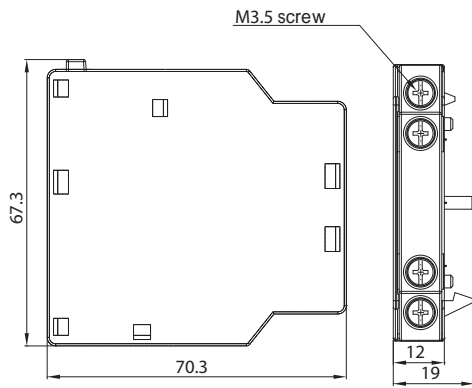


**YC9Z-CUA4**



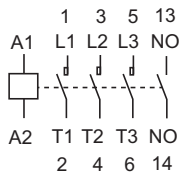
**Side Mounting Auxiliary Contact**

**YC9Z-CNA111SR (1a1b for YC1U-9 to YC1U-40)**

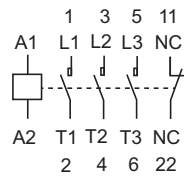


**Electrical Diagrams**

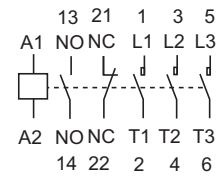
**YC1U-9/11/16 (1NO Aux.)**



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



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



All dimensions are in mm.

### 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	75	75	85	85	10	15	30	40	75	100	2NO-2NC	YC1N-100	A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
	50	80	85	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	

**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				
105	105	100	93	75	100	68	92	104	96	99	2NO-2NC	YC1N-100	+	A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
126	115	115	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	55	55	65	65	2NO-2NC	YC1N-100	+	A24: 24V AC A120: 120V AC A240: 240V AC A480: 480V AC
37	60	63	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**

Description	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

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

Description	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
	110VAC		YC9Z-LCN180A110
	120VAC		YC9Z-LCN180A120*
	208VAC		YC9Z-LCN180A208
	220VAC		YC9Z-LCN180A220
	240VAC		YC9Z-LCN180A240*
	480VAC		YC9Z-LCN180A480*
	220, 300		24VAC
		110VAC	YC9Z-LCN300A110
		120VAC	YC9Z-LCN300A120*
		208VAC	YC9Z-LCN300A208
		220VAC	YC9Z-LCN300A220
		240VAC	YC9Z-LCN300A240*
		480VAC	YC9Z-LCN300A480*

\* Standard stock coil voltages.

## 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 Endurance (Operations)	1,000,000					
Mechanical Endurance (Operations)	5,000,000					
Operating Temperature	-20°C ~ 55°C					
Storage Temperature	-40°C ~ 70°C					
Weight (Kg)	1.9		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: 35 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: 660 UL:600					
Operational Voltage, Ue (V)	IEC: 660 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

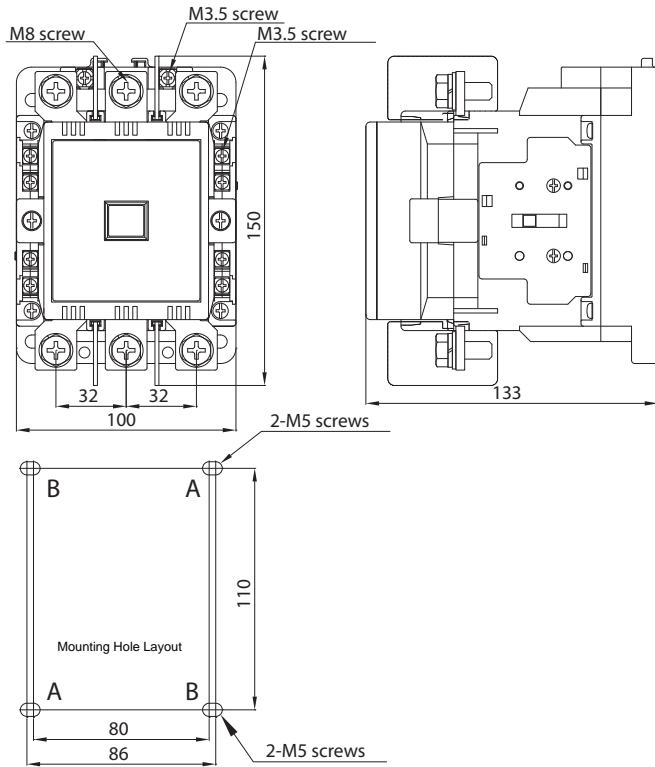
		YC1N-100/YC1N-125	YC1N-150/YC1N-180	YC1N-220/YC1N-300
Pick-up Voltage	50/60Hz	83%	75%	75%
Drop-out Voltage		45%	45%	45%
Power Consumption, max. (VA)	Inrush	300	700	300
	Sealed	63	88	63
Power Dissipation max. (W)		9-15	25-35	9-15



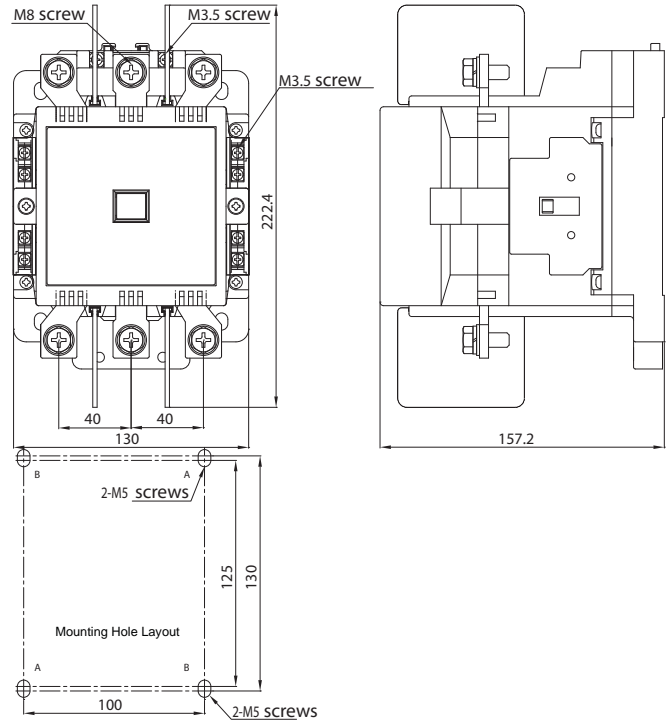
Dimensions

Contactors

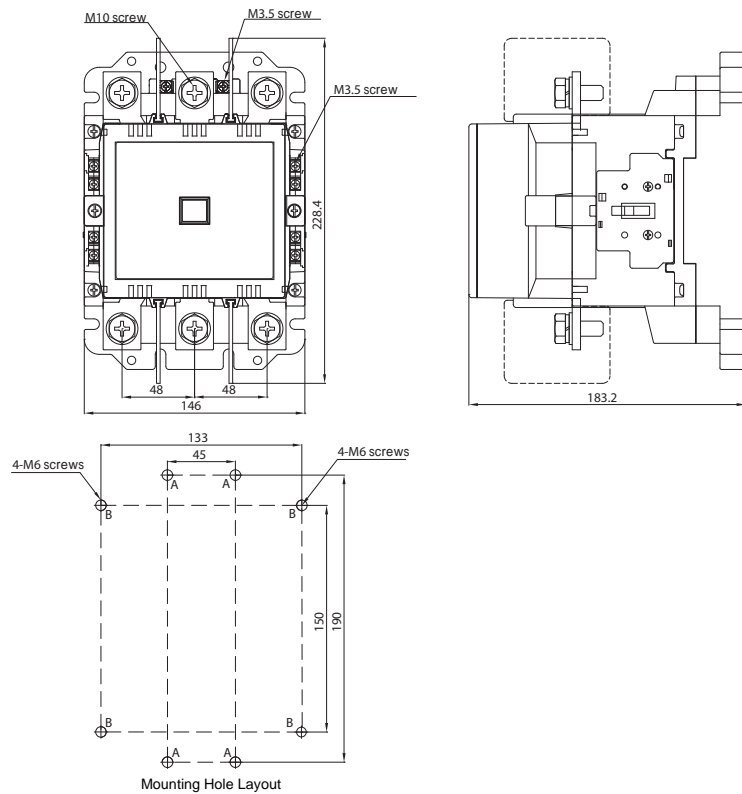
YC1N-100, YC1N-125



YC1N-150, YC1N-180



YC1N-220, YC1N-300

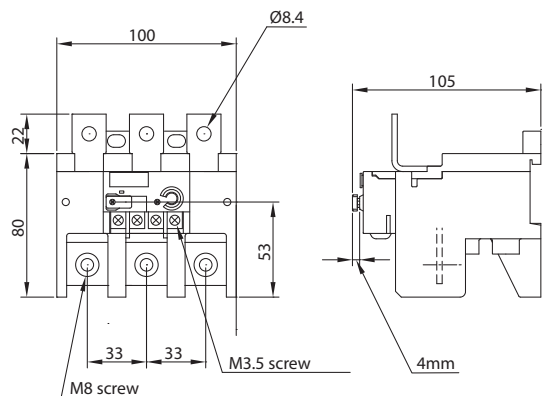


All dimensions are in mm.

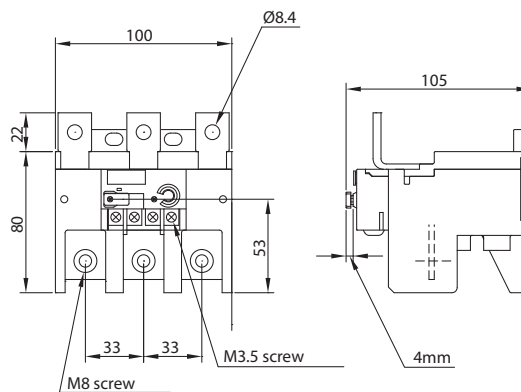
**Accessories**

**Overload Relay**

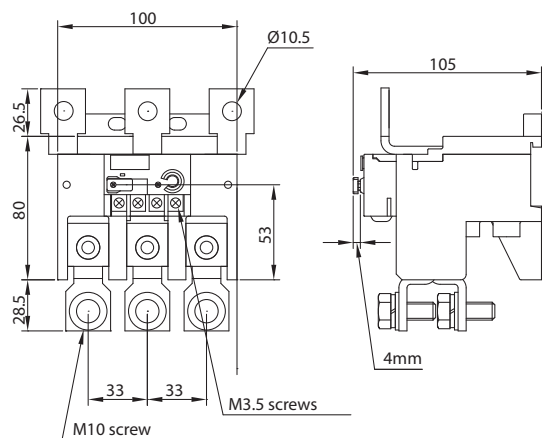
**YC9Z-RHN100**



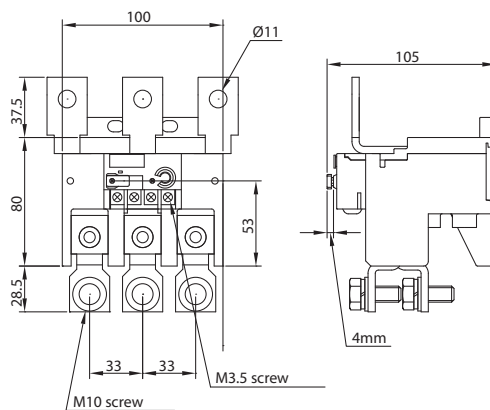
**YC9Z-RHN150**



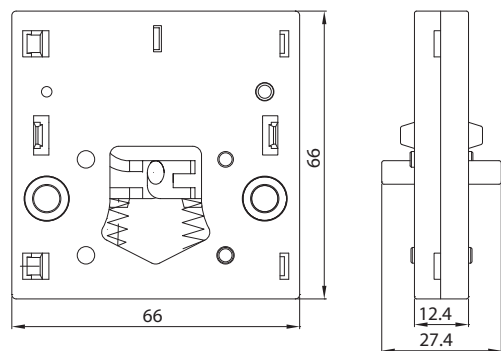
**YC9Z-RHN180**



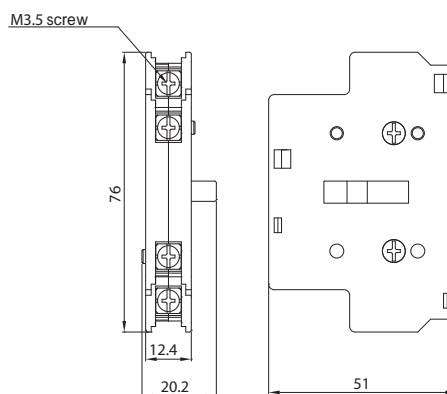
**YC9Z-RHN220**



**Mechanical Interlock YC9Z-CI100**



**Side Mounting Auxiliary Contact YZ9Z-CNA11BC (1a1b)**



**Electrical Diagram**

**YC1N-100 to YC1N-300**



All dimensions are in mm.

### YC1A Series Contactors (DC Coil)



#### Part Number Key

YC1A – **9** **B** **D24**

**Contactor Size\***  
9, 12, 18, 22, 32, 40, 50, 65

\*see selection table for details

**Coil Voltage**

D24: 24V DC\*  
D48: 48V DC  
D110: 110V DC  
D125: 125V DC

**Auxiliary Contact Arrangement**

Blank: 1NO (size 9 - 12)  
1NO & 1NC (size 18 - 65)  
B: 1NC (size 9 - 12)

#### 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 Voltages
	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	3	3	5.5	7.5	7.5	1/3	1	2	2	5	5	1NO	YC1A-9	+ D24: 24V DC* D48: 48V DC D110: 110V DC D125: 125V DC
														1NC	YC1A-9B	
	0.75	1.5	4	7.5	7.5	10	10	3/4	2	3	3	7.5	5	1NO	YC1A-12	
														1NC	YC1A-12B	
	1	2	5.5	10	12	13.5	13.5	1	3	5	5	10	13.5	1NO-1NC	YC1A-18	
	1.5	3	7.5	15	15	20	20	2	3	7.5	7.5	15	15	1NO-1NC	YC1A-22	
	2	5	12	20	20	25	25	2	3	7.5	7.5	15	15	1NO-1NC	YC1A-32	
	3	5.5	15	25	30	30	30	5	10	20	20	50	40	1NO-1NC	YC1A-40	
	4	7.5	20	35	40	40	40	3	7.5	10	15	40	40	1NO-1NC	YC1A-50	
	5.5	10	25	40	50	50	50	5	10	20	20	50	40	1NO-1NC	YC1A-65	

\* Standard coil voltage.

**Selection by Amp Rating**

Rated Power (A) per AC3 IEC 60947-4-1							Rated Power (A) per UL508 CSA C22.2 (A)						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		
9	9	9	9	9	9	6.6	7.2	8	7.8	6.8	7.6	6.1	1NO	YC1A-9
													1NC	YC1A-9B
12	12	12	12	12	12	8.9	13.8	12	11	9.6	1.1	6.1	1NO	YC1A-12
													1NC	YC1A-12B
18	18	18	18	18	11.5	11.5	16	17	17.5	15.2	14	15	1NO-1NC	YC1A-18
22	22	22	22	22	23	17.3	24	17	25.3	22	21	17	1NO-1NC	YC1A-22
35	35	35	32	32	30	23	24	17	25.3	22	21	17	1NO-1NC	YC1A-32
40	40	40	40	40	33	25.2	34	40	32.2	42	40	32	1NO-1NC	YC1A-40
50	50	50	50	50	45	36	34	40	32.2	42	52	41	1NO-1NC	YC1A-50
65	65	65	65	65	55	42	56	50	62	54	65	41	1NO-1NC	YC1A-65

Coil Voltages
D24: 24V DC*
D48: 48V DC
D110: 110V DC
D125: 125V DC

+

\* Standard coil voltage.

**Selection by Killowatt 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	660V	690V		
0.4	0.75	2.2	2.2	4	5.5	5.5	5.5	1NO	YC1A-9
								1NC	YC1A-9B
0.55	1.1	3	5.5	5.5	7.5	7.5	7.5	1NO	YC1A-12
								1NC	YC1A-12B
0.75	1.5	4	7.5	9	10	10	10	1NO-1NC	YC1A-18
1.1	2.2	5.5	11	11	15	15	15	1NO-1NC	YC1A-22
1.5	3.7	9	15	15	18.5	18.5	18.5	1NO-1NC	YC1A-32
2.2	4	11	18.5	22	22	22	22	1NO-1NC	YC1A-40
3	5.5	15	25	30	30	30	30	1NO-1NC	YC1A-50
4	7.5	18.5	30	37	37	37	37	1NO-1NC	YC1A-65

Coil Voltages
D24: 24V DC*
D48: 48V DC
D110: 110V DC
D125: 125V DC

+

\* Standard coil voltage.

**Accessories**

Description	Part Number
Mechanical Interlock	YC9Z-CAI65

Description	Form A (NO)	Form A (NC)	Part Number
Top Mount Auxiliary Contact	-	2NC	YC9Z-CAA202
	1NO	1NC	YC9Z-CAA211
	2NO	-	YC9Z-CAA220
	3NO	1NC	YC9Z-CAA431
	4NO	-	YC9Z-CAA440
Side Mount Contact Block	1NO	1NC	YC9Z-CAA211S

Description	Contactor Size	Coil Voltage	Part Number
Replacement Coils	9~12	24VDC	YC9Z-LCA12D24*
		48VDC	YC9Z-LCA12D48
		110VDC	YC9Z-LCA12D110
		125VDC	YC9Z-LCA12D125
	18~22	24VDC	YC9Z-LCA22D24*
		48VDC	YC9Z-LCA22D48
		110VDC	YC9Z-LCA22D110
		125VDC	YC9Z-LCA22D125
	32~40	24VDC	YC9Z-LCA40D24*
		48VDC	YC9Z-LCA40D48
		110VDC	YC9Z-LCA40D110
		125VDC	YC9Z-LCA40D125
50~65	24VDC	YC9Z-LCA65D24*	
	48VDC	YC9Z-LCA65D48	
	110VDC	YC9Z-LCA65D110	
	125VDC	YC9Z-LCA65D125	

\* Standard stock coil voltages.

### Specifications

#### General Specifications

	YC1A-9	YC1A-12	YC1A-18	YC1A-22	YC1A-32	YC1A-40	YC1A-50	YC1A-65
Contact Configuration	3A1a , 3A1b		3A1a1b		3A1a1b		3A1a1b	
Making Capacity (A)	10xIe		10xIe		10xIe		10xIe	
Breaking Capacity (A)	8xIe		8xIe		8xIe		8xIe	
Switching Frequency (Operations/ Hr)	1200		1200		1200		1200	
Electrical Endurance (Operations)	1,000,000,000		10,000,000		10,000,000		1,000,000,000	
Mechanical Endurance (Operations)	100,000,000		1,000,000		1,000,000		100,000,000	
Operating Temperature	-20°C ~ 65°C							
Storage Temperature	-40°C ~ 70°C							
Weight (Kg)	0.5		0.6		0.95		1.9	

Note: Ie = rated operational current

#### Pole Specifications

	YC1A-9	YC1A-12	YC1A-18	YC1A-22	YC1A-32	YC1A-40	YC1A-50	YC1A-65
Insulation Voltage, Ui (V)	IEC: 690 UL: 600		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		IEC: 690 UL: 600	
Thermal Current, I <sub>th</sub> (A)	IEC: 20 UL: 20		IEC: 35 UL: 30		IEC: 60 UL: 50	IEC: 60 UL: 55	IEC: 80 UL: 70	IEC: 80 UL: 80
NEMA Size Equivalent (approx.)	00	0	0	1	2	2	2	2

#### Auxiliary Circuit Specifications

	YC1A-9	YC1A-12	YC1A-18	YC1A-22	YC1A-32	YC1A-40	YC1A-50	YC1A-65
Contact Configuration	1a or 1b			1a1b				
Insulation Voltage, Ui (V)	IEC: 660 UL: 600							
Operational Voltage, Ue (V)	IEC: 660 UL: 600							
Thermal Current, I <sub>th</sub> (A)	10							
Contact Rating Code Designator UL	A600 Q300							
Rated 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					

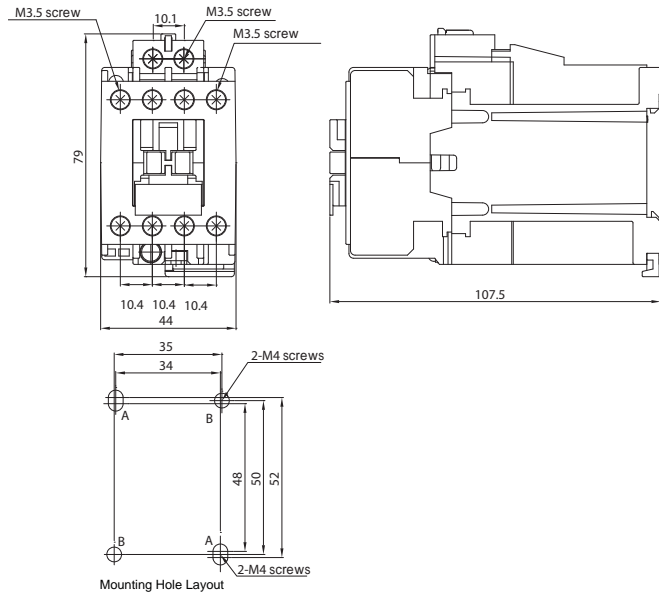
#### Coil Specifications

	YC1A-9	YC1A-12	YC1A-18	YC1A-22	YC1A-32	YC1A-40	YC1A-50	YC1A-65
Pick-up Voltage	50/60Hz	75%						
Power Consumption, max. (VA)	Inrush	-						
	Sealed	3						
Power Dissipation max. (W)	3							

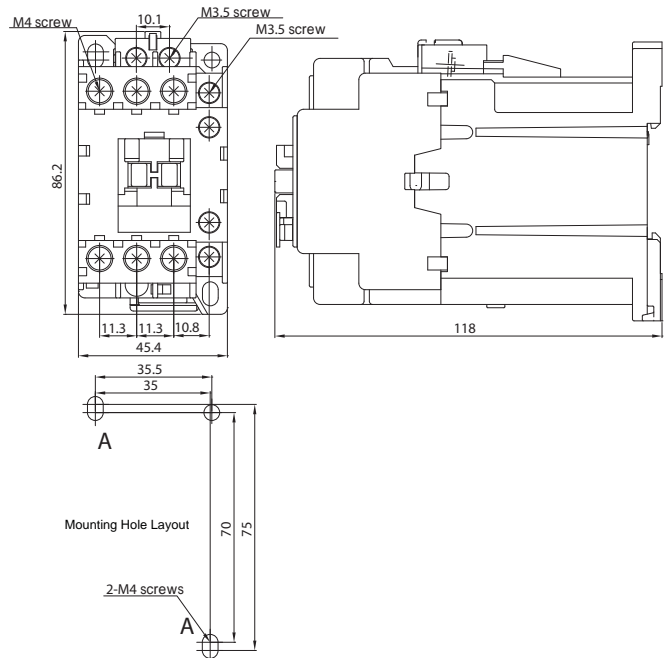
Dimensions

Contactor

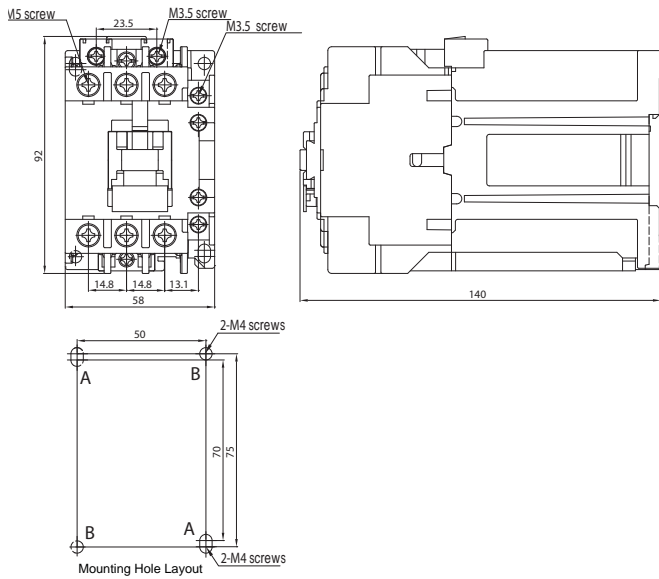
YC1A-9, YC1A-12



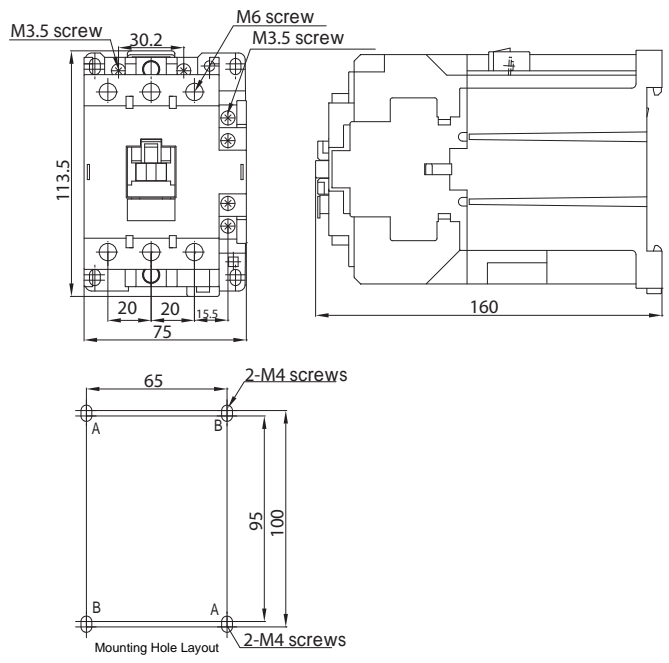
YC1A-18, YC1A-22



YC1A-32, YC1A-40



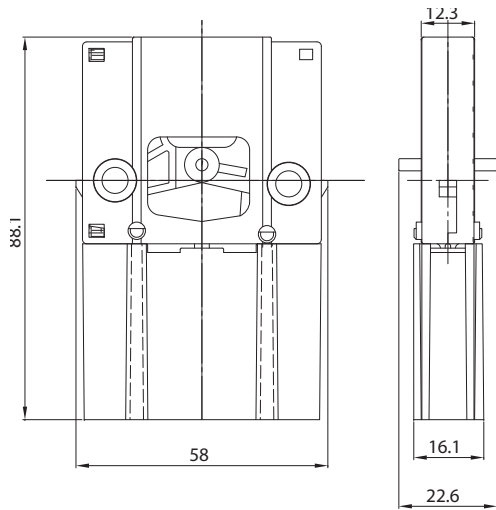
YC1A-50, YC1A-65



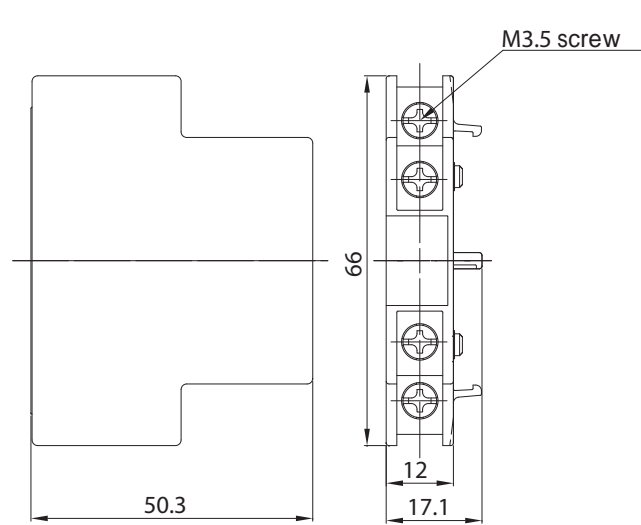
All dimensions are in mm.

Accessories

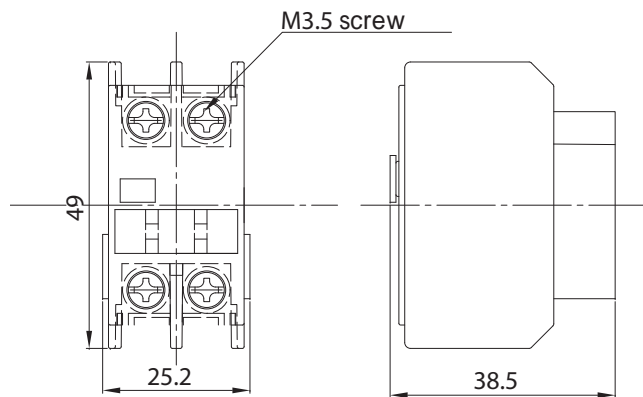
Mechanical Interlock YC9Z-CAI65



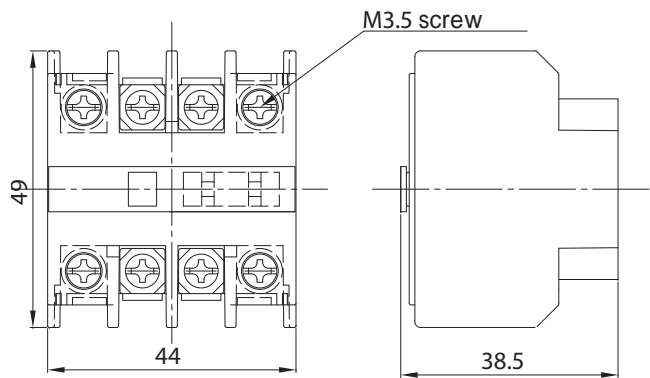
Side Mounting Auxiliary Contact YC9Z-CAA211S (1a1b)



Top Mounting Auxiliary Contact YC9Z-CAA2 (2b, 1a1b, 2a)

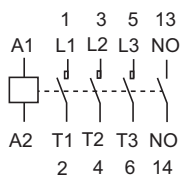


YC9Z-CAA4 (3a1b, 4a)

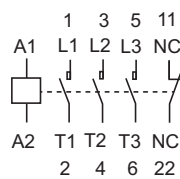


Electrical Diagrams

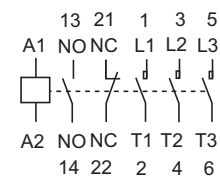
YC1A-9/12 (1N0)



YC1A-9/12 (1NC)



YC1A-18 to YC1A-65





## The Highest Level of Safety

The XN4E series is the first and only E-Stop to enable maintenance technicians to install up to twenty personal padlocks, preventing unauthorized resetting of the latched emergency stop switch and making service or maintenance safer to perform.

XN switches also incorporate our unique "Safe Break Action" ensuring that the NC contacts open when the contact block is separated from the operator.



## NC1V Circuit Protectors

The NC1V circuit protectors have a manufacturing design that creates a modern look and feel, while providing enhanced reliability and safety you depend on from IDEC products. They include spring-up terminals and IP20 finger-safe protection, designed to reduce wiring time and increase safety.

The slim 35mm-wide housing saves space and can be DIN rail mounted. They are available in 1-pole, 2-pole and 3-pole configurations.



## Product Support

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