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# CONTROL SWITCHES



**csii**



## VOLTMETER/AMMETER SWITCHES

Control Switches International, Inc.

# VOLTMETER SWITCHES

**VOLTMETER**

OFF

L1-N  
L2-N  
L3-N

**61311**

1	2	3	4	5	6	7	8
OFF							
L1-N	X					X	
L2-N		X					X
L3-N			X				X

**VOLTMETER**

OFF

L1-L2  
L2-L3  
L3-L1

**61312**

1	3	5	7	9
2	4	6	8	
OFF				
L1-L2	X			X
L2-L3		X		X
L3-L1			X	X

**VOLTMETER**

OFF

L3-L1 L1-N  
L2-L3 L2-N  
L1-L2 L3-N

**61313**

1	5	10	15	20
2	4	8	12	16
L3-L1	X			X
L2-L3		X	X	X
L1-L2	X			
OFF				
L1-N	X	X		
L2-N		X	X	
L3-N	X		X	

**VOLTMETER**

L1-N L2-N  
L3-L1 L3-N  
L2-L3 L1-L2

**61314**

1	5	10	15	20
2	4	8	12	16
L1-L2	X			X
L2-L3		X	X	X
L3-L1	X			
L1-N	X	X		
L2-N		X	X	
L3-N	X		X	

**VOLTMETER**

OFF

L1-L2 L1-N  
L2-L3 L2-N  
L3-L1 L3-N

**61317**

1	2	3	4	5	6	7	8
L3-L1	X					X	
L2-L3		X					X
L1-L2	X						
OFF							
L1-N	X	X					
L2-N		X	X				
L3-N	X		X				

**VOLTMETER**

L1-L2 L2-L3  
L3-L1

**61319**

1	5	9	
2	4	6	10
L1-L2	X		X
L2-L3		X	X
L3-L1	X		

**VOLTMETER**

OFF

L1-L2 L1-L2  
L2-L3 L2-L3  
L3-L1 L3-L1

**61318**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L3-L1	X							X					X		
L2-L3		X							X					X	
L1-L2	X									X					
OFF															
L1-L2	X	X													
L2-L3		X	X												
L3-L1	X		X												

**VOLTMETER**

L1-L2 L2-L3  
OFF L3-L1

**61485**

1	5	9	
2	4	6	
OFF			
L1-L2	X		X
L2-L3		X	X
L3-L1	X		

# VOLTMETER/AMMETER COMBINATION SWITCHES

**VOLTMETER AMMETER**

1

OFF

2

3

**61336**

1	5	7	9	11	13	15	17	19
2	4	6	8	10	12	14	16	18
L1-L2, PH1	X		X		X		X	
L2-L3, PH2		X	X		X	X	X	
L3-L1, PH3	X	X		X	X	X	X	

**VOLTMETER AMMETER**

2

1

3

4

**61337**

1	5	7	9	11	13	15	17	19	21
2	4	6	8	10	12	14	16	18	20
L1-L2	X		X		X		X		X
L2-L3, PH1	X	X		X	X	X	X	X	
L3-L1, PH2	X	X		X	X	X	X	X	
L1-N, PH3	X		X	X	X	X	X	X	

**VOLTMETER AMMETER**

1

OFF

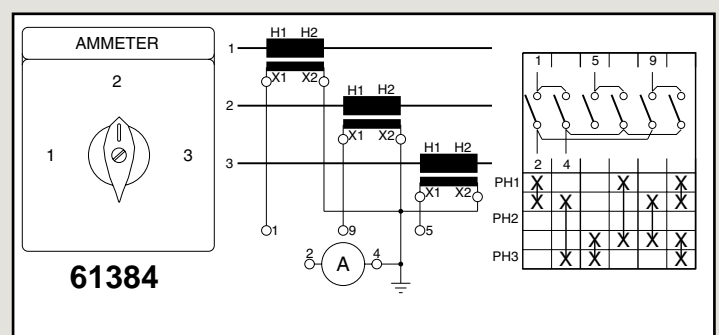
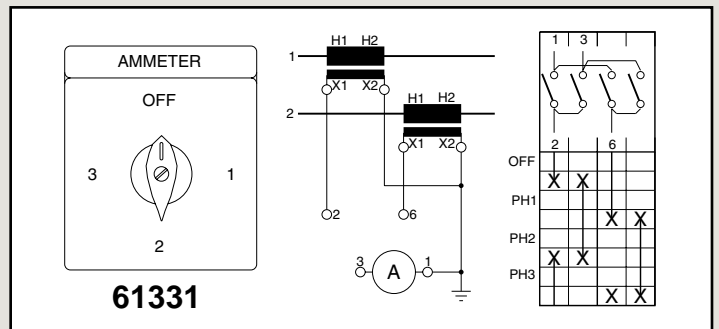
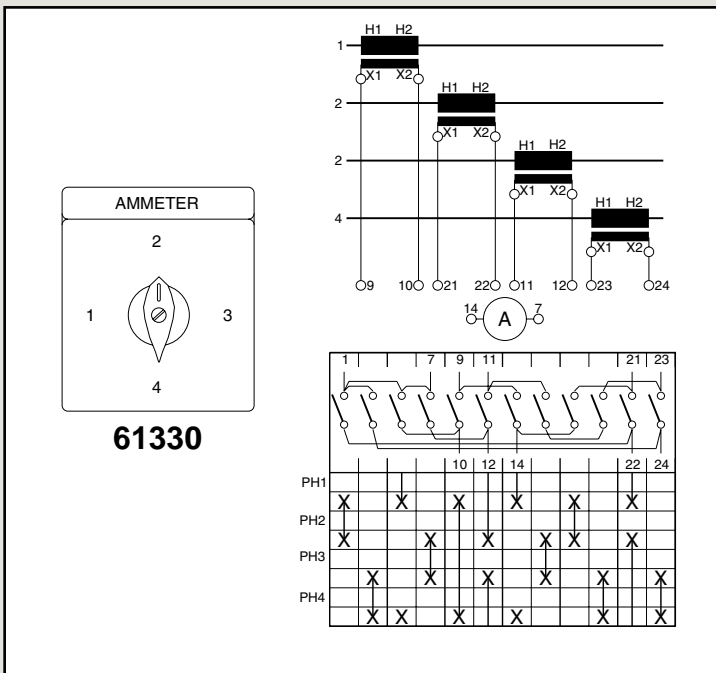
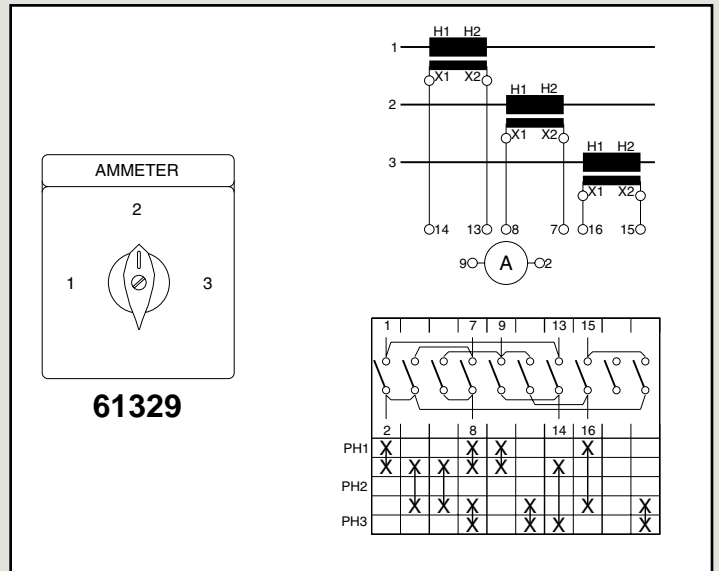
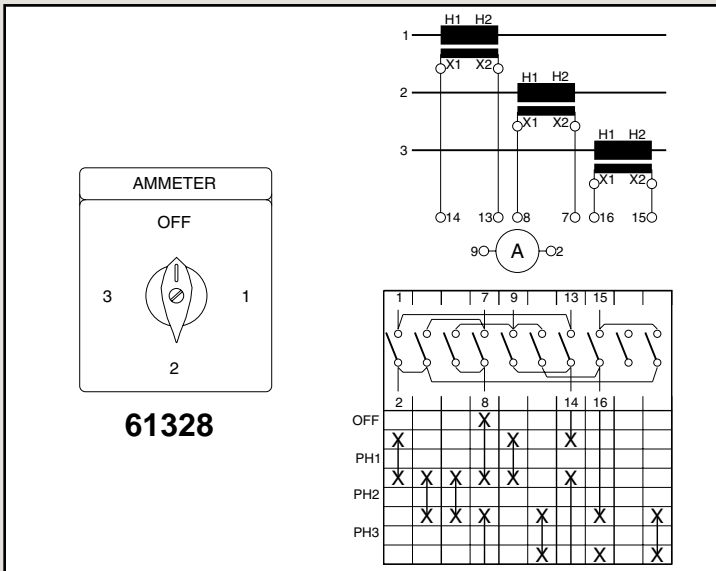
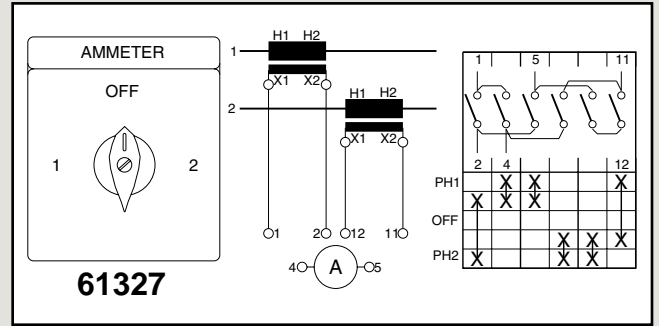
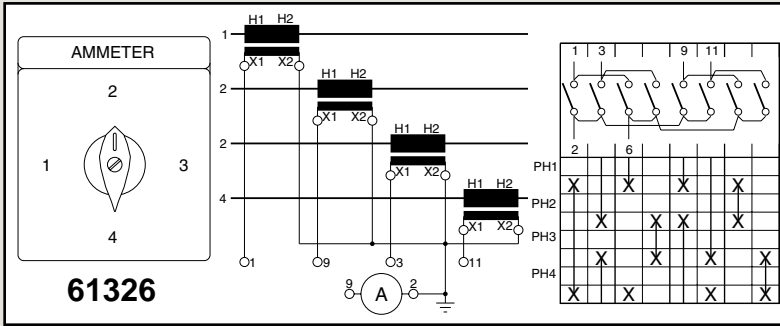
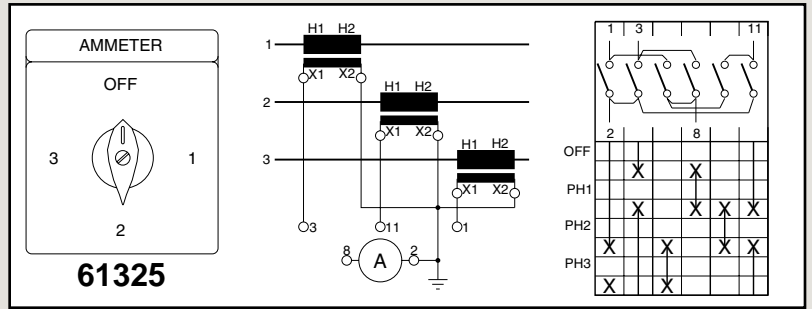
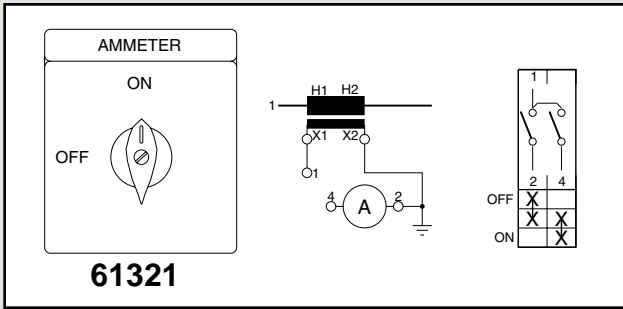
2

3

**61338**

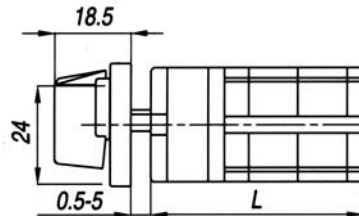
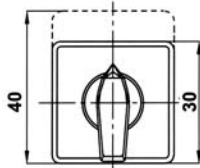
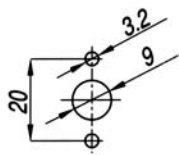
1	5	7	9	11	13	15	17	19
2	4	6	8	10	12	14	16	18
L1-N, PH1	X		X		X		X	
L2-N, PH2		X	X		X	X	X	
L3-N, PH3	X	X		X	X	X	X	

# AMMETER SWITCHES

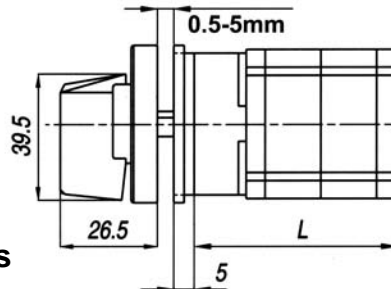
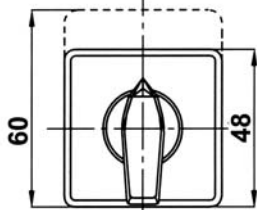
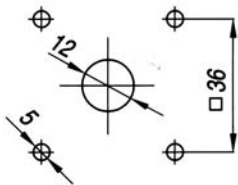


### Technical Information

Switch Type	F10	F20	N12	N20	N25
UL Amperage	10	15	15	20	30
UL Voltage	240	240	300	600	600
AWG	16	16	14	12	10

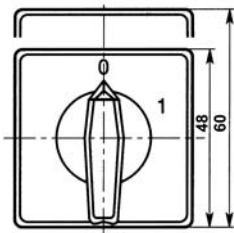


“F10” Series

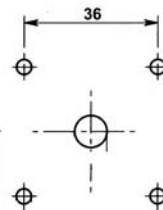
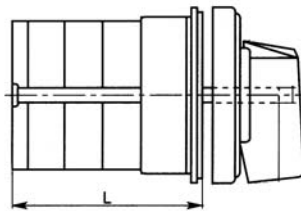


“F20” Series

Switch Type	Dimension “L” for Number of Stages (mm)											
	1	2	3	4	5	6	7	8	9	10	11	12
F10	40.0	52.0	64.0	76.0	88.0	100.0	112.0	124.0	-	-	-	-
F20	36.0	49.5	63.0	76.5	90.0	103.5	117.0	130.5	144.0	157.5	171.0	184.5



“N” Series



Switch Type	Dimension “L” for Number of Stages (mm)											
	1	2	3	4	5	6	7	8	9	10	11	12
N12	32.5	42.1	51.7	61.3	70.9	80.5	90.1	98.7	103.3	118.9	128.5	138.1
N20	33.1	42.8	52.5	62.2	71.9	81.6	91.3	101.0	110.7	120.4	130.1	139.8
N25	37.5	51.1	64.7	78.3	91.9	105.5	119.1	132.7	146.3	159.9	173.5	187.1

Note: Single hole mounting available on the N series.  
 Next larger size mounting available on F & N Series.  
 Consult factory for dimensions.

Voltmeter  
Switches  
-  
Ammeter  
Switches  
-  
Combination  
Voltmeter  
&  
Ammeter  
Switches  
-  
Single  
&  
Three  
Phase

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