



Non-fused Rotary Disconnect Switch Technical Data

Bulletin Number 194U

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Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.rockwellautomation.com/global/certification/overview.page	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/global/literature-library/overview.page>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

LISTEN.
THINK.
SOLVE.



Product Selection

30...125 A Disconnect Switches

Catalog Number Explanation

Examples given in this section are not intended to be used for product selection. Use ProposalWorks to configure the 194U Disconnect Switch. ProposalWorks is available from <http://www.rockwellautomation.com/global/e-tools/overview.page>.

194U	–	A	30	–	1753
a		b	c		d

a	
Bulletin Number	
Code	Description
194U	UL-rated disconnect switch

b	
Mounting Type	
Code	Description
A	DIN Rail mount
E	Front Mount

c		
Rated Current [A]		
Code	UL	IEC
30	30	40
60	60	63
100	100	125
160	125	160

d	
No. of Poles, OFF-ON 90° Configuration	
Code	Description
1753	3 Poles
1754	4 Poles (160 A devices only)

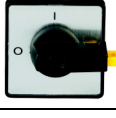
	Description	Rated Current [A]	No. of Poles	Cat. No.
	Base Mount Disconnect Switch	30	3	194U-A30-1753
		60		194U-A60-1753
		100		194U-A100-1753
		125	3	194U-A160-1753
			4	194U-A160-1754
	Front Mount Disconnect Switch	30	3	194U-E30-1753
		60		194U-E60-1753
		100		194U-E100-1753
		125	3	194U-E160-1753
			4	194U-E160-1754

125 A Disconnect Switch Kits

	Description	Handle Color	Rated Current [A]	No. of Poles	Cat. No.
	Front-mounted disconnect switch kit • Contains switch body, handle, and shaft	Black	125	3	194U-160DMK-3B
		Red/yellow		4	194U-160DMK-4B
				3	194U-160DMK-3Y
				4	194U-160DMK-4Y

Switch Handles

	Description	For Use With	Color	Cat. No.
	Padlockable handle, standard • 3R, 3, 12, 4, 4X Protection	Bul. 194U and 194R disconnect switches up to 60 A	Black	194R-PB
			Red/yellow	194R-PY
	Padlockable handle, standard • 3R, 3, 12, 4, 4X Protection	Bul. 194U base-mounted switches, 30...100 A and Bul. 194E Control and Load Switches	Black	194E-SB
			Red/yellow	194E-SY
	Switch handle	Bul. 194U front-mounted switches, 125 A	Black	194U-FB
			Red/yellow	194U-FY
	NFWA 79 internal operating handle with 12 in. (30.48 cm) shaft	Bul. 194U base-mounted switches, 30...125 A	—	194U-N1

	Description	Legend Marking	Switch Current Rating	For Use With	Color	Cat. No.
	Type N handle • 67 x 67 mm (2-41/64 x 2-41/64 in.) • Locking for up to three padlocks (padlocks not included)	0-1 OFF-ON	30...100 A	Front- and base-mounted switches	Red/yellow	194L-HE6N-175
	Type G handle • 67 x 67 mm (2-41/64 x 2-41/64 in.) • Locking for up to three padlocks (padlocks not included)	0-I OFF-ON	30...100 A	Front- and base-mounted switches	Black/grey	194L-HE6G-175
	Type L handle • 67 x 67 mm (2-41/64 x 2-41/64 in.) • Locking for one padlock (padlock not included)	0-I	30...100 A	Front- and base-mounted switches	Red/yellow	194L-HE6L-175
		OFF-ON				194L-HE6L-175I
	Type E handle • 67 x 67 mm (2-41/64 x 2-41/64 in.) • Locking for one padlock (padlock not included)	0-I	30...100 A	Front- and base-mounted switches	Black/grey	194L-HE6E-175
		OFF-ON				194L-HE6E-175I
	Type I handle • 67 x 67 mm (2-41/64 x 2-41/64 in.)	0-I	30...100 A	Front- and base-mounted switches	Red/yellow	194L-HE6I-175
		OFF-ON				194L-HE6I-175I
	Type A handle • 67 x 67 mm (2-41/64 x 2-41/64 in.)	0-I	30...100 A	Front- and base-mounted switches	Black/grey	194L-HE6A-175
		OFF-ON				194L-HE6A-175I

Additional Terminals

	Description	Mounting Style	For Use With	Cat. No.
	Ground terminal	Base	30, 60 A switches	194U-A60-PE
			100 A switches	194U-A100-PE
		Front/Door	30, 60 A switches	194U-E60-PE
			100 A switches	194U-E100-PE
	4th pole terminal	Base	100 A switches	194U-A100-FP
		Front/Door	100 A switches	194U-E100-FP

Other Accessories

	Description		For Use With	Cat. No.
	Extension kit for G, N, I, A, L, E handles	9.25 in. (23.5 cm)	base-mounted 30...100 A switches	194U-G3393
		13.9 in.(35.3 cm)		194U-G3394
	Shaft	for G, N, I, A, L, E front-mounted handles	30...100 A switches	194U-G3688
		12 in. (30.5 cm)	S-type shaft for 30...125 A switches	194U-S1
		21 in. (53.3 cm)		194U-S2
	Front-mount handle adapter		base-mounted 125 A switches	194U-DMA
	Auxiliary contact	normally closed	30...125 A switches	194U-NC
		normally open		194U-NO
		normally open/ normally closed	30...100 A switches	194U-NONC
	Terminal Shroud	1-pole (qty: 1)	30...100 A switches	194U-C1
			125 A switches	194U-160-C1
		3-pole (qty: 1)	30...100 A switches	194U-C3
			125 A switches	194U-160-C3
	Padlock Accessory		base-mounted 30...125 A switches	194U-LOTO
	Repair Kit			194U-RK

Specifications

		194U-*30	194U-*60	194U-*100	194U-*160	
Standards Compliance		UL98	UL98	UL98	UL98	UR
Ampere rating	[A]	30	60	100	100	125
Max Voltage	[V AC]	600	600	600	600	600
Max Hp/FLA, 3-phase AC						
240V	[Hp/A]	10/28	20/54	30/80	40/104	40/104
480V	[Hp/A]	20/27	40/52	50/65	75/96	75/96
600V	[Hp/A]	30/32	30/32	30/32	100/99	100/99
Max Hp/FLA, 1-phase AC						
120V	[Hp/A]	2/24	3/34	5/56	NA	NA
240V	[Hp/A]	5/28	7.5/40	15/68	20/88	20/88
480V	[Hp/A]	NA	NA	NA	30/66	30/66
Max Hp/FLA, 250V DC	[Hp/A]	NA	NA	NA	20/60	20/60
Short Circuit rating						
J fuse	[kA]	200	200	200	100	100
T fuse	[kA]	200	200	200	100	100
Fuse size	[A]	100/60	100/60	100/100	200	200
Electrical endurance, operating cycles		6000	6000	6000	6000	6000
Mechanical endurance, operating cycles		10000	10000	10000	10000	10000
Wire range	[mm ²]	10...70	10...70	10...70	10...70	10...70
	[AWG]	14...4	14...4	8...1/0	8...1/0	8...1/0
Tightening torque	[lb-in.]	55	55	55	53	53

		194U-*30	194U-*60	194U-*100	194U-*160
Standards Compliance		cULus, EAC, IEC	cULus, EAC, IEC	cULus, EAC, IEC, CCC	cULus, EAC, IEC, CCC
Rated insulation Voltage/Operational voltage AC20/DC20	[V]	750	750	750	1000
Rated impulse withstand voltage	[kV]	8	8	8	12
Rated operational current, AC-20/DC20					
Open/Enclosed	35 °C (95 °F)	[A]	—	—	160
	40 °C (104 °F)	[A]	—	125	160
Enclosed	35 °C (95 °F)	[A]	—	—	160
	60 °C (140 °F)	[A]	—	100	—
Cu Wire cross section	[mm ²]	—	—	50	70
Rated operational current, AC-21A					
415...690V	[A]	—	—	125	160
Rated operational current, AC-22A					
415...690V	[A]	40	63	125	160
Rated operational current, AC-23A					
415V	[A]	40	63	90	160
440V	[A]	40	63	65	—
500V	[A]	40	63	60	160
690V	[A]	40	40	40	160
Rated operational current, DC-21A					
1 pole in series	24...48V	[A]	—	125	—
2 poles in series	110V	[A]	—	125	—
4 poles in series	220V	[A]	—	125	—
Rated operational current, DC-22A					
1 pole in series	24...48V	[A]	—	125	—

			194U-*30	194U-*60	194U-*100	194U-*160
2 poles in series	110V	[A]	—	—	125	—
4 poles in series	220V	[A]	—	—	80	—
Rated operational current, DC-23A						
1 pole in series	24...48V	[A]	—	—	125	—
2 poles in series	110V	[A]	—	—	125	—
4 poles in series	220V	[A]	—	—	63	—
Rated operational power, AC-23A						
220...240V	[kW]		—	—	22	45
400...415V	[kW]		15	18.5	45	75
440V	[kW]		—	—	45	75
500V	[kW]		—	—	45	90
690V	[kW]		15	15	45	132
Rated breaking capacity, AC-23A						
415V	[A]		—	—	720	1280
440V	[A]		—	—	624	1280
500V	[A]		184	360	560	1280
690V	[A]		96	160	400	1280
Rated breaking capacity, DC-23A						
24...48V	[A]		—	—	500	—
110V	[A]		—	—	500	—
220V	[A]		128	180	252	—
Rated conditional SCCR, I_p (r.m.s)						
I_p (r.m.s)	50 kA	[kA]	16.5	16.5	16.5	—
Max fuse size gG/aM	up to 415V	[A]	125/125	125/125	125/125	—
I_p (r.m.s)	100 kA	[kA]	—	—	—	30
Max fuse size gG/aM	500V	[A]	—	—	—	200/200
I_p (r.m.s)	10 kA	[kA]	8.2	8.2	8.2	—
Max fuse size gG/aM	690V	[A]	125/100	125/100	125/100	—
Prospective SCCR	50 kA	[kA]	10	10	10	24
Max fuse size gG/aM	690V	[A]	63/63	63/63	63/63	200/200
Rated short-time withstand current						
r.m.s	690V, 1 s	[kA]	2.5	2.5	2.5	4
Peak	690V/500V	[kA]	3.6/3.6	3.6/3.6	3.6/3.6	12/—
Power Lost per pole		[W]	0.7	1.6	6.3	6.5
Weight		[kg]	0.4	0.4	0.44	0.9 (3-pole), 1.1 (4-pole)
		[lb]	0.88	0.88	0.97	1.98 (3-pole), 2.42 (4-pole)
Operating temperature		[°C]	-5...+40	-5...+40	-5...+40	-5...+40
		[°F]	23...104	23...104	23...104	23...104
Storage temperature		[°C]	-25...+55	-25...+55	-25...+55	-25...+55
		[°F]	-13...131	-13...131	-13...131	-13...131

Approximate Dimensions

Dimensions are in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.

Figure 1 - 30, 60, and 100 A Base-mounted Switches, 3- and 4-pole Devices

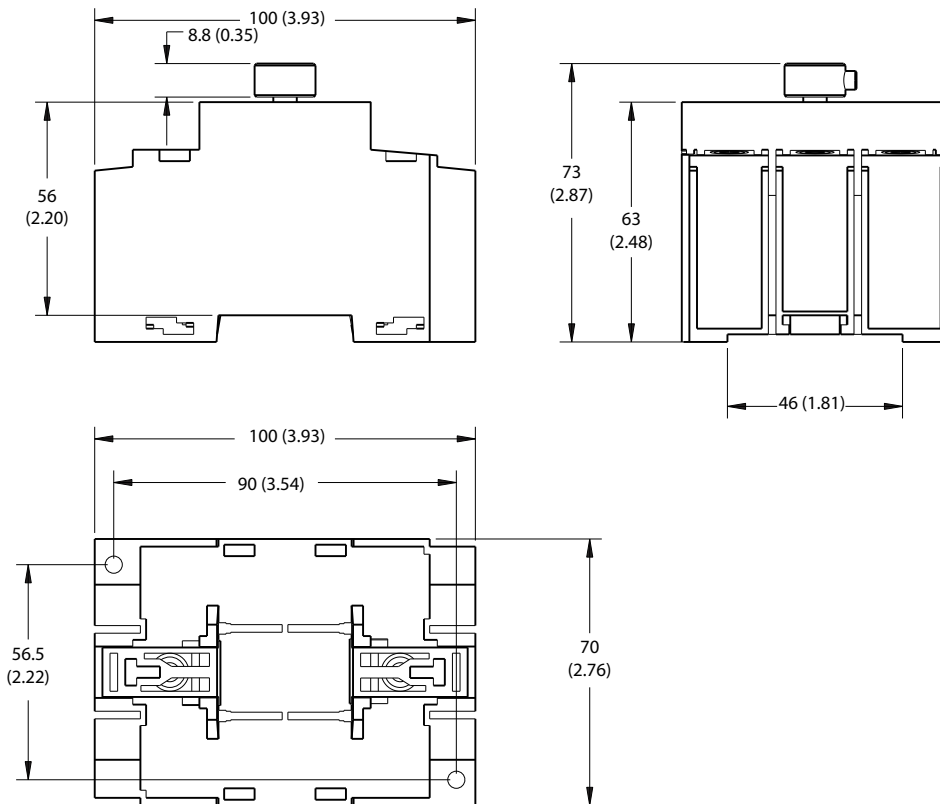


Figure 2 - 30, 60, and 100 A Door-mounted Switches, 3- and 4-pole Devices

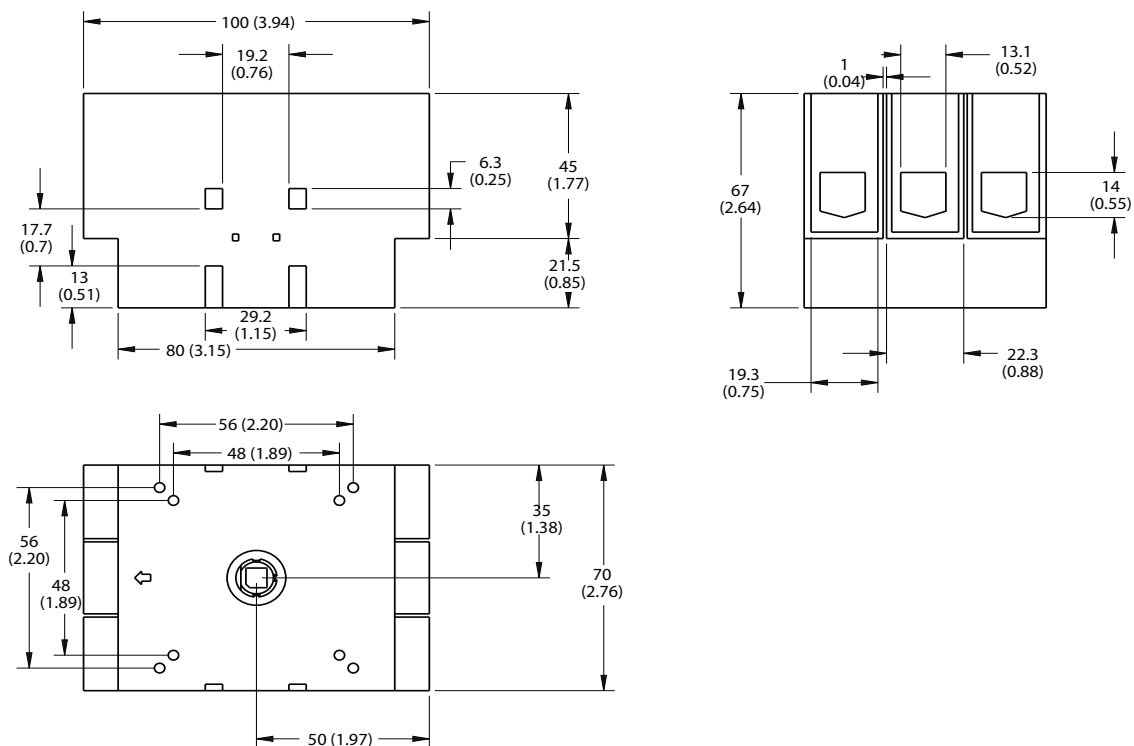


Figure 3 - 125 A Base-mounted Switches, 3-pole Devices

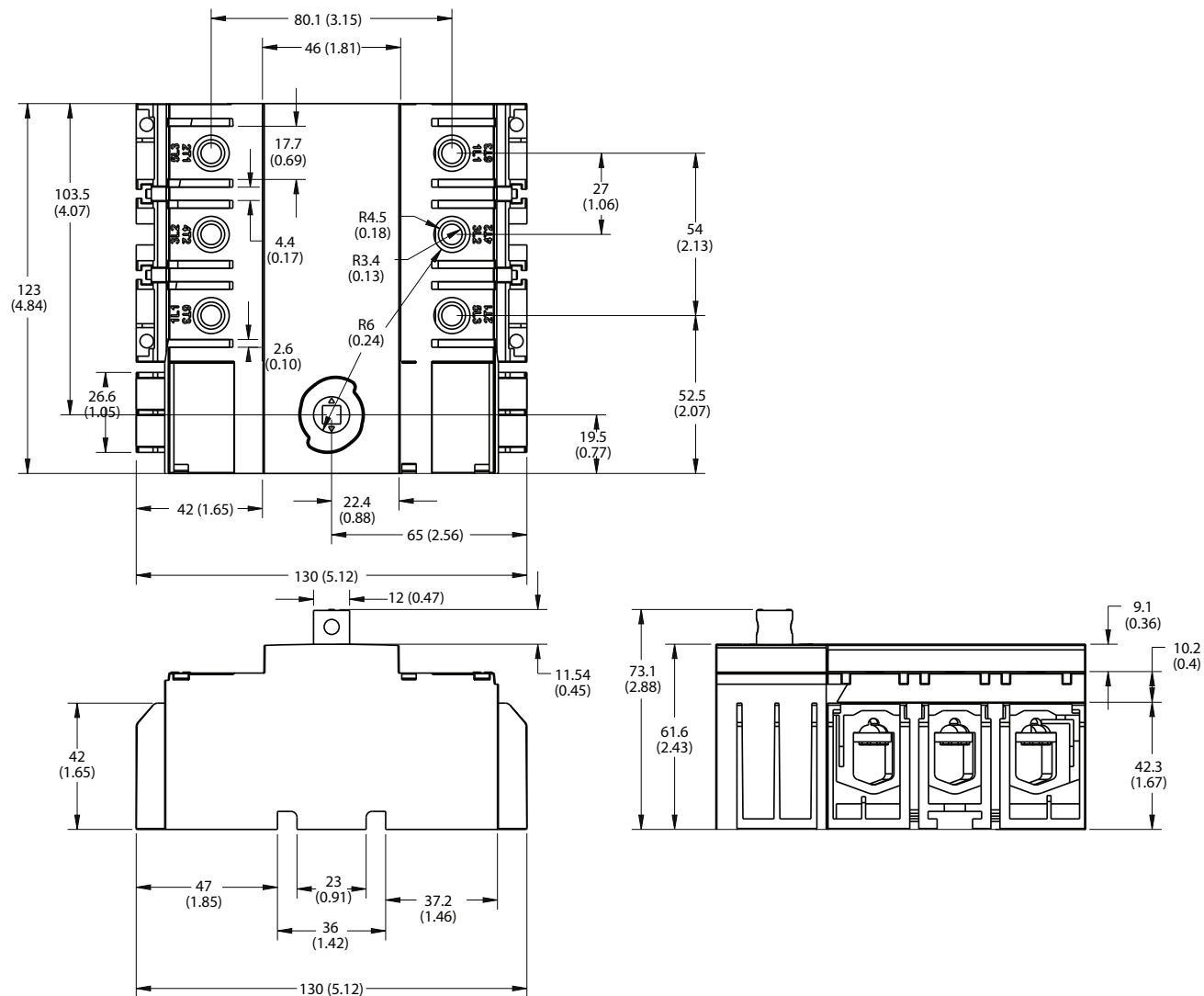
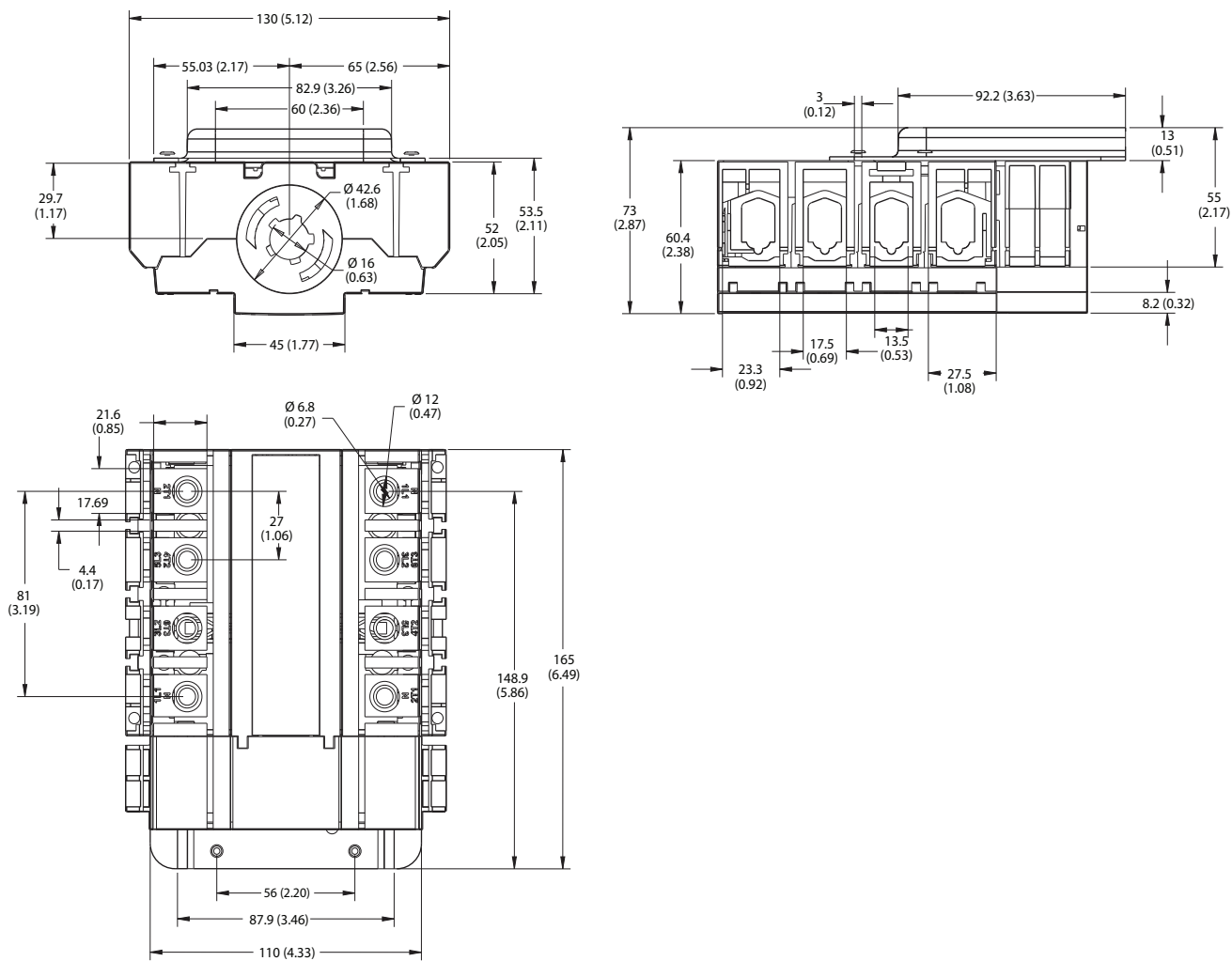


Figure 6 - 125 A Door-mounted Switches, 4-pole Devices



Notes:

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	www.rockwellautomation.com/knowledgebase
Local Technical Support Phone Numbers	Locate the phone number for your country.	www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	www.rockwellautomation.com/literature
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	www.rockwellautomation.com/global/support/pcdc.page

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Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

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