

J-SERIES

J-FRAME MOULDED CASE CIRCUIT BREAKER

PRODUCT INTRODUCTION

The CBI J-Frame is a robust hydraulic-magnetic moulded case circuit breaker range engineered for reliable protection across industrial, commercial, and power distribution applications. Designed with 100% rating capacity independent of ambient temperature, the J-Frame series delivers precision tripping, fast reset after overload. Its versatile design includes one and three pole configurations, a mechanical trip confirmation button, and a wide selection of optional accessories such as shunt trips, auxiliary switches, undervoltage releases, and lockable handles. With approvals including SANS 556-1 and SANS 60947-2/3, the J-Frame MCCB series offers a high-performance, compliant solution built to operate reliably in demanding environments ranging from telecoms and UPS systems to renewable energy and mobile power generation.



MCCB
Surface Mount
1 Pole



MCCB
Surface Mount
3 Pole



Switch Disconnecter
Surface Mount
3 Pole

FEATURES

- Hydraulic-magnetic technology
- 100% rating capacity; independent of ambient temperature
- One and three poles
- Trip button for mechanical confirmation of operation
- Precision tripping characteristics
- Reset immediately after overload

OPTIONAL ACCESSORIES

- Shunt trip
- Auxiliary switch
- Undervoltage release
- Trip Alarm
- Handle lock
- Interphase barriers
- Terminal covers
- Various termination types

APPLICATIONS

- AC branch circuit installations
- Industrial
- Reticulation
- Transformer protection
- Telecom/datacom equipment
- UPS equipment
- Alternative energy equipment
- Mobile power generation
- Municipal kiosks (feeder breaker)

APPROVALS

SANS 556-1 SANS 60947-2/3



(IEC/EN 60947-2)



(IEC 60947-2)

TECHNICAL DATA

ELECTRICAL	
Dielectric Strength	1 480 V (single pole) / 1 830 - 2 100 V (multi pole), 50 Hz for one minute after testing
Time Delay Curves	JS

MECHANICAL	
Endurance	10 000 operations; 1 500 electrical at rated current and voltage (IEC 60947-2)

ENVIRONMENTAL	
Operating Temperature Range	-40°C to +85°C
Altitude	Tested at 1 600 m above sea level
Flammability	I3 - Ignition does not persist at 850°C after glow wire is withdrawn with an oxygen index of ≥ 28
Humidity	35 to 85% relative
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

PHYSICAL	
Mounting Options	Surface mount
Number of poles	1 or 3 pole
Weight	1,3 kg - JS25, 3 kg - J25S, 2,37 kg - J25SN (unpacked)
Standard Colours	Shell - white Handle - white or red

Please note: Refer to the standards for details

Product Type	Circuit Breaker JS25	Circuit Breaker J25S	Switch Disconnector J25SN
Standard Ampere Ratings (A) – AC	80 A - 250 A	50 A - 250 A	100 A - 250 A
Number of Poles	1	3	
Tripping Curve	JS	JS	-
Terminations	Standard	G1 lug terminal up to 150 A; G4B stub busbar above 150 A	
	Optional	G1 extended lug up to 250 A; G2 box terminal up to 100 A; G7 rear connecting studs up to 250 A; G5 tandem box up to 250 A.	

Approvals	SANS 556-1, SANS 60947-2		
Product Type	JS25	J25S	
Number of Poles	1	3	
Operating Voltages (AC)	240 Vac	415 Vac	525 Vac
Minimum Current Rating	80 A	50 A	
Maximum Current Rating	250 A		
Interrupting Capacity	25 kA	25 kA	15 kA

Approvals	SANS 556-1, SANS 60947-3	
Product Type	J25SN	
Number of Poles	3	
Operating Voltages (AC)	415 Vac	525 Vac
Minimum Current Rating	100 A	
Maximum Current Rating	250 A	
Interrupting Capacity	25 kA	15 kA

ORDERING INFORMATION

Example Code 1: JSS0125

Group	1	2
Requirement	JS25 Frame	125 A
Order Number	JSS0	125

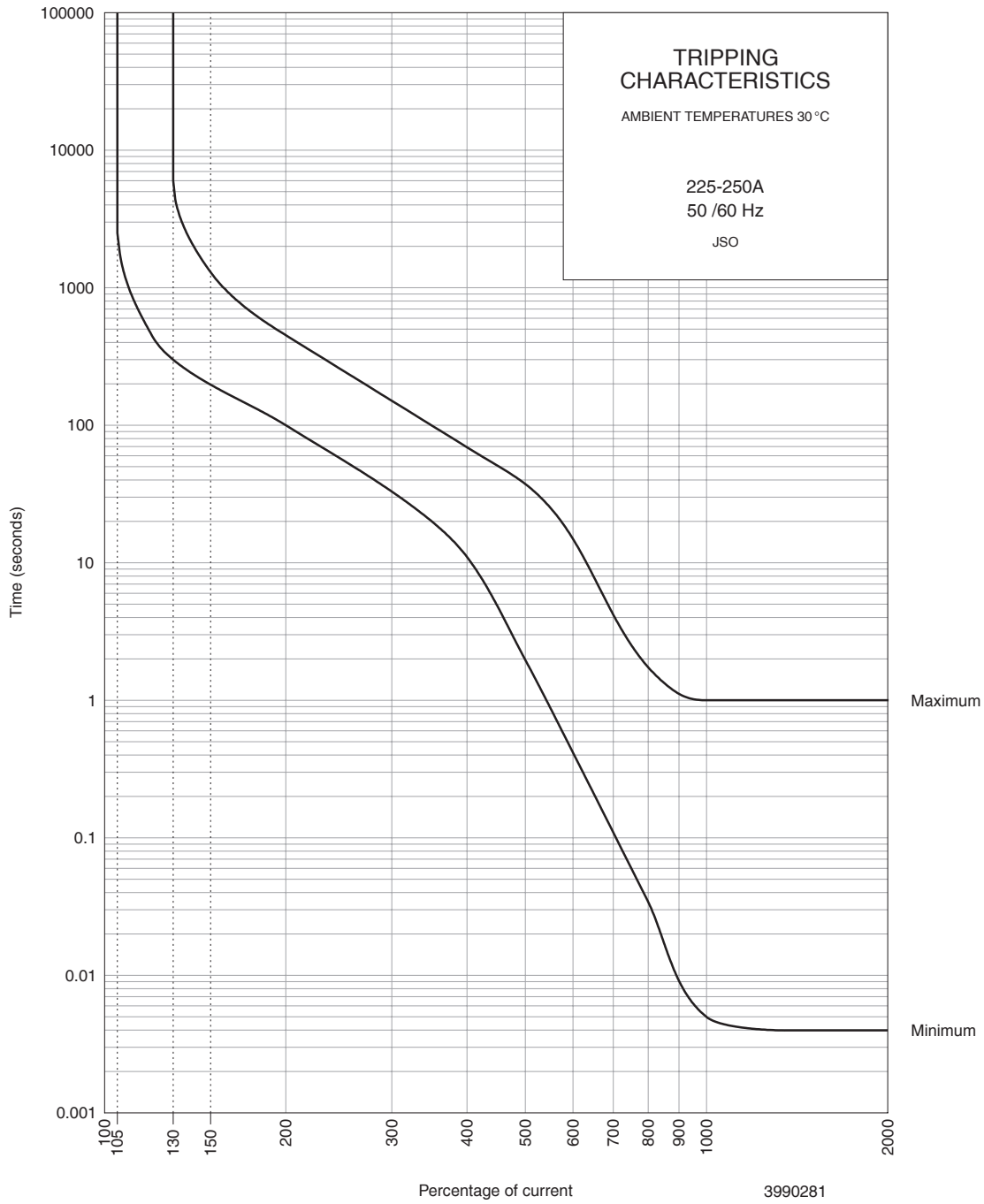
Type	Barriers	Poles	Terminals	kA @			Rating (A)	Order No.
				240 V	415 V	525 V		
Distribution Circuit Breakers (Mixed Load)								
JS25		1	G1	25	-	-	80, 100	JSS0_ _ _
							125	JSS0125
			G4B	25	-	-	150	JSS0150
							200	JSS0200
							250	JSS0250
J25S	4	3	G1	-	25	15	50, 60	JSO0_ _ _
							80, 100	JSO0_ _ _
							125	JSO0125
							150	JSO0150
			G4B	-	25	15	160, 175, 200	JSO0150
							225	JSO0225
							250	JSO0250
Switch Disconnecter								
J25SN	3	3	G1	-	25++	15++	100	JSN0100
							150	JSN0150
			G4B	-	25++	15++	200	JSN0200
							250	JSN0250

For options not listed, please contact CBI

JS ACCESSORIES ORDERING INFORMATION

Description	Comments	Order Number
Shunt Trip	110 - 250 Vac	FSA002
	380 - 600 Vac	FSA003
Undervoltage Release	220 - 250 Vac	FSAC220
	380 - 440 Vac	FSAC380
Auxiliary Switch		FSAH002
Trip Alarm Switch		FSAF001
Auxiliary + Trip Alarm Switch Combo		FSAV001
Handle Lock		FSAP001
G4B Stub Busbar (150 - 250 A)	3 per set for line or load side	FSAX001
G5 Tandem Box Terminal (250 A max.)	3 per set for line or load side	FSAX002
Interphase Barriers	Set of 2	FSAX004
Terminal Covers Set (Line + Load)		FSAX005

TIME DELAY CURVES

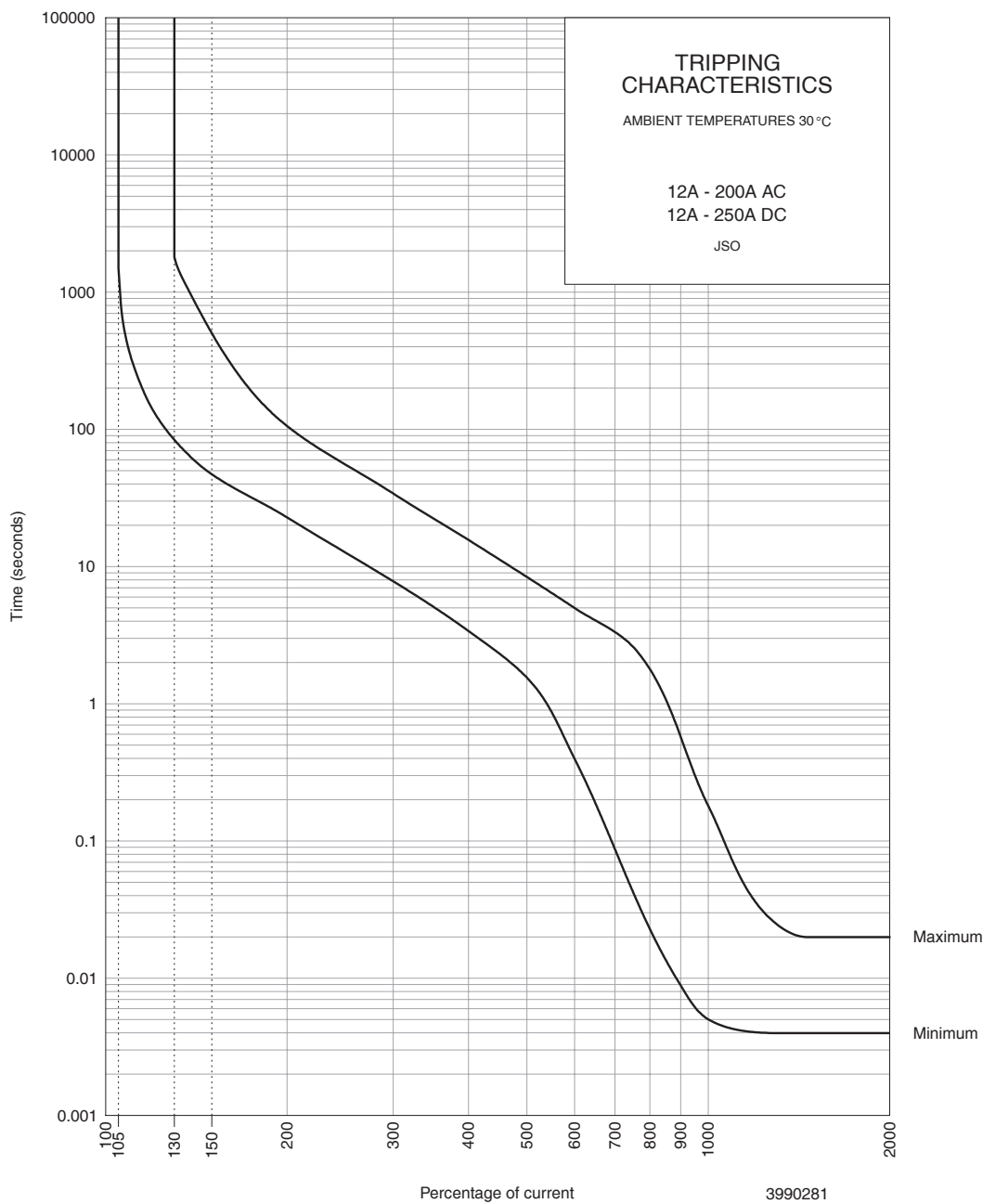


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REV H

PERCENTAGE OF RATED CURRENT	105%	130%	135%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	300	264	197	100	32	11	2	0.4	0.1	0.03	0.01	0.005	0.004
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	6000	2860	1300	450	150	70	37	15	4.2	1.7	1.11	1	1

* The published time delay curves are generated at 30°C ambient temperature with the circuit breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

TIME DELAY CURVES

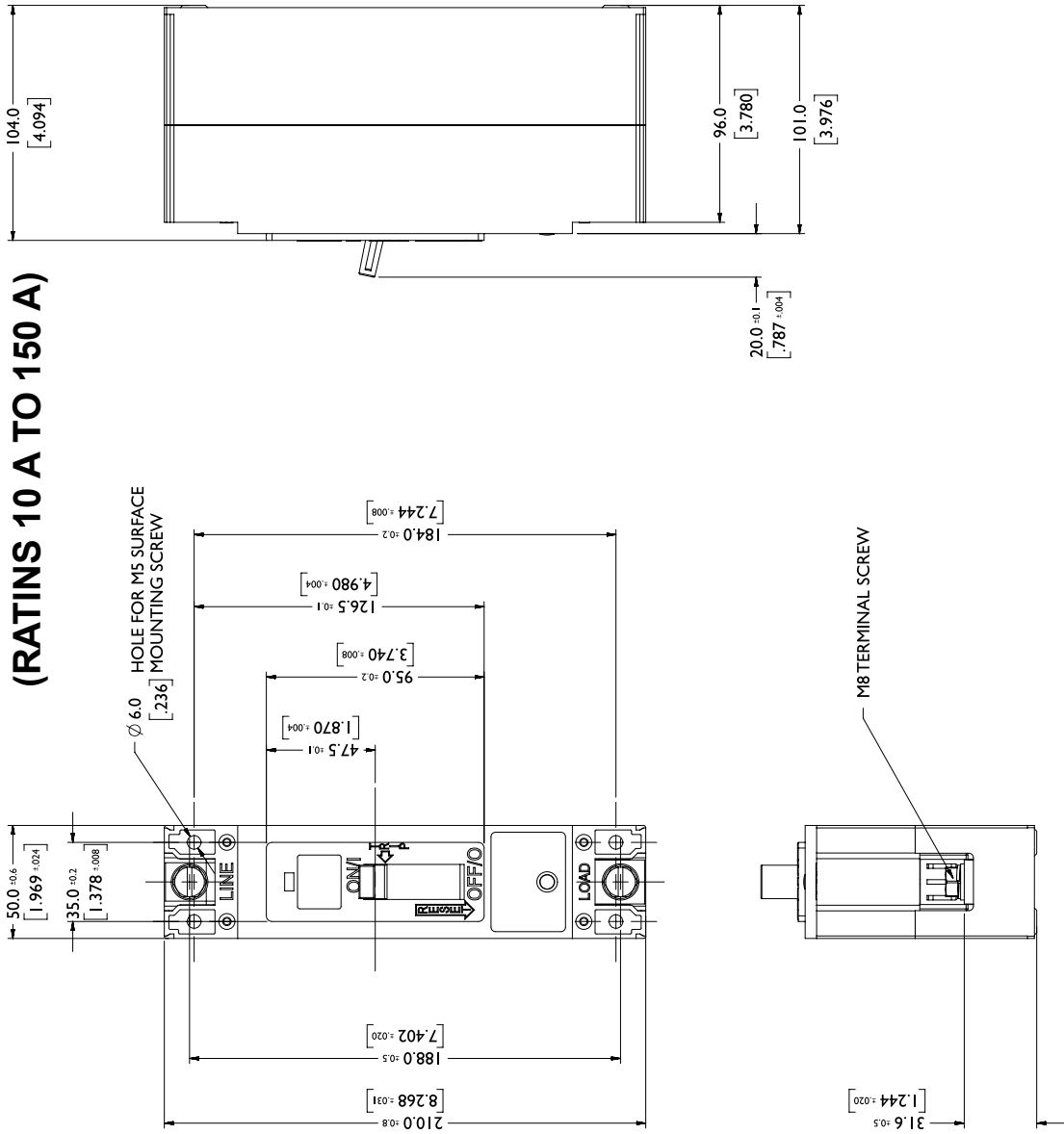


PERCENTAGE OF RATED CURRENT	105%	130%	135%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	2000%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	85	70	47	23	7.5	3.4	1.6	0.4	0.09	0.02	0.009	0.005	0.004
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	1800	1200	500	105	35	18	8.4	5	3.3	1.8	0.6	0.18	0.02

* The published time delay curves are generated at 30°C ambient temperature with the circuit breaker mounted in the up-right position. The “must hold”, “must trip” and “instantaneous trip” current values are not affected by temperature, although delay time for the other operating current values may have to be adjusted using the temperature compensation curve which is available on request.

JS25 FRAME DIMENSIONAL DRAWINGS

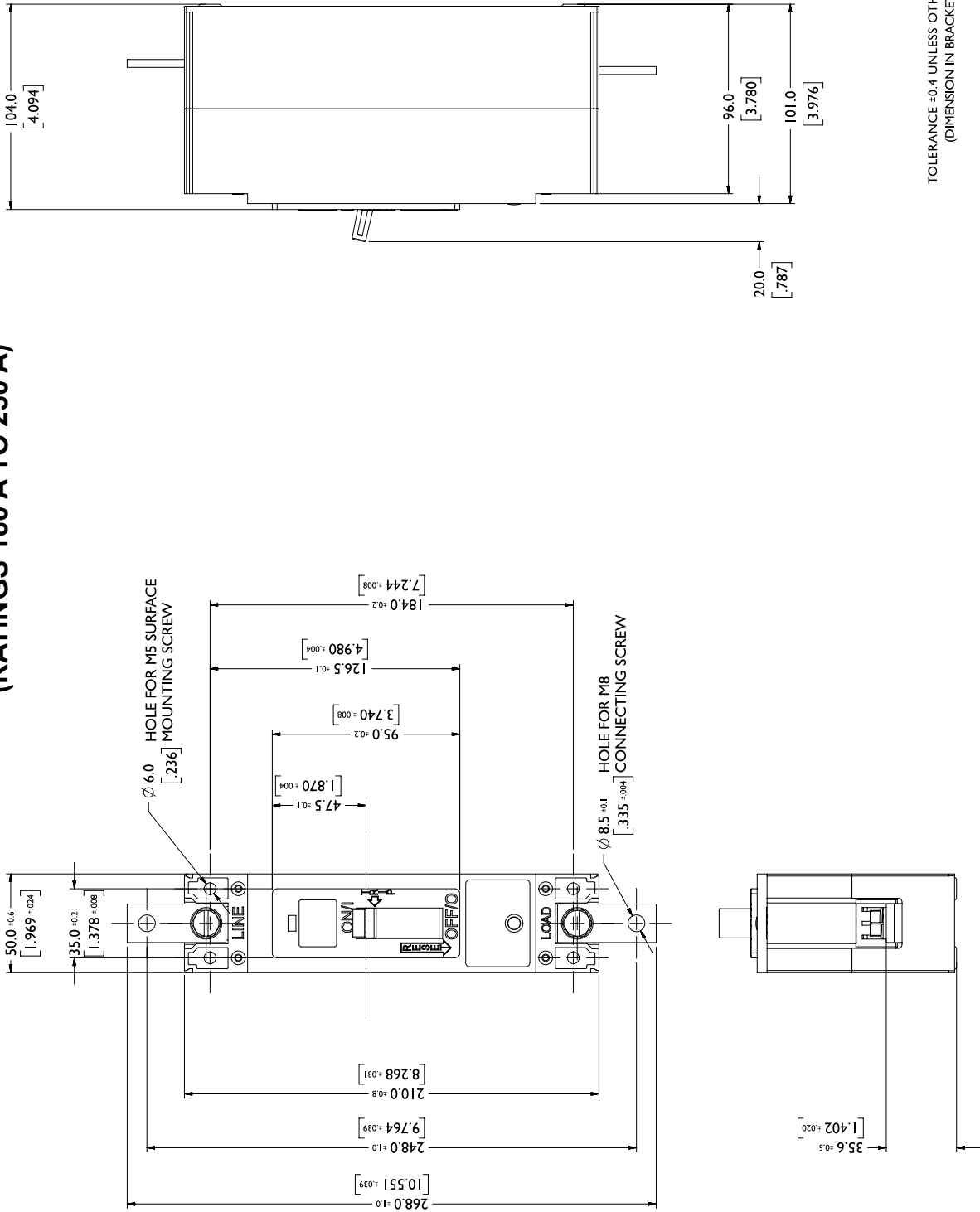
**LUG CONNECTING UNIT
(RATINGS 10 A TO 150 A)**



TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

JS25 FRAME DIMENSIONAL DRAWINGS

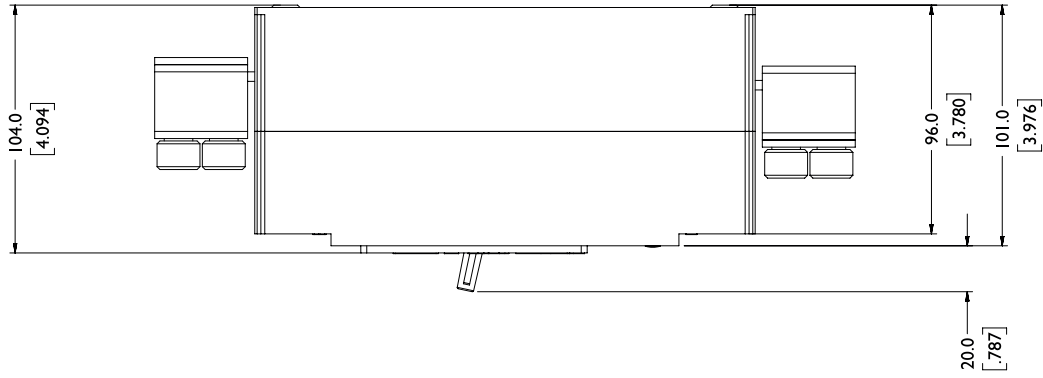
**EXTENDED LUG CONNECTING UNIT
(RATINGS 160 A TO 250 A)**



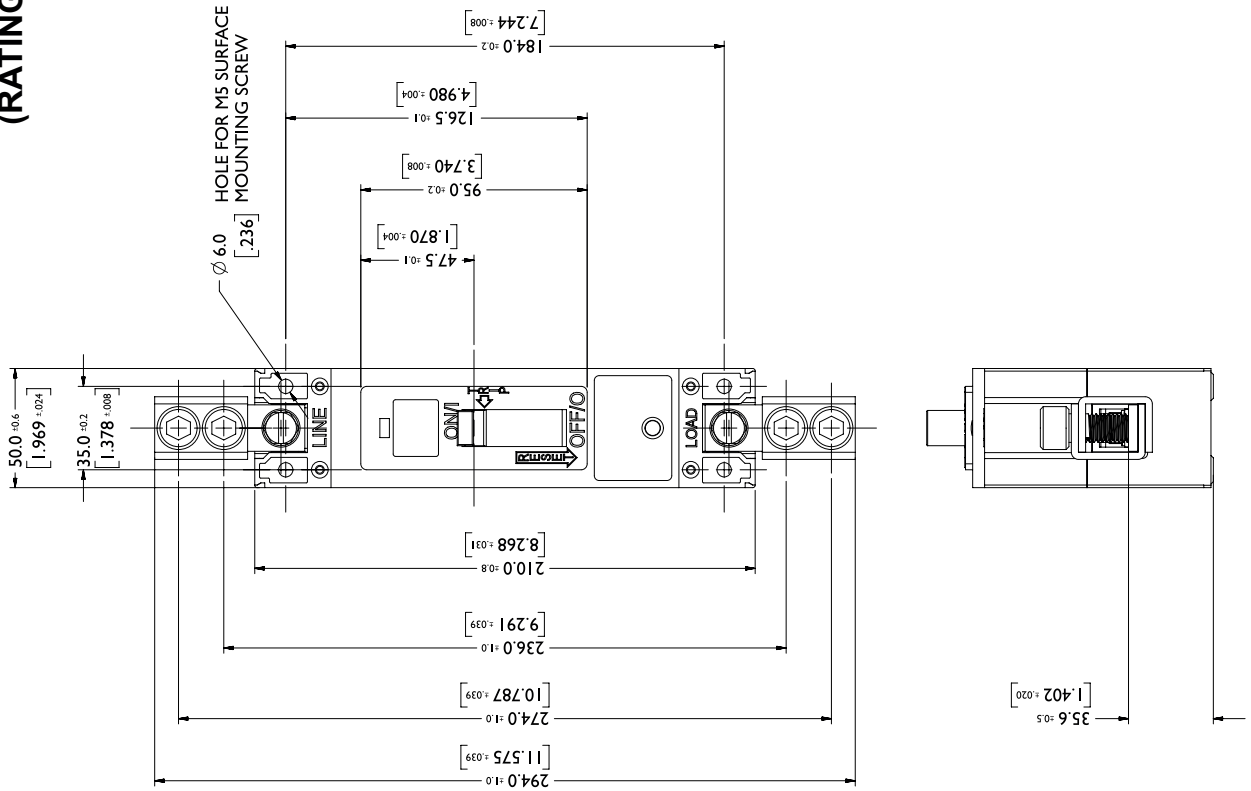
TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

JS25 FRAME DIMENSIONAL DRAWINGS

**TENDEM BOX TERMINAL UNIT
(RATINGS 10 A TO 250 A)**

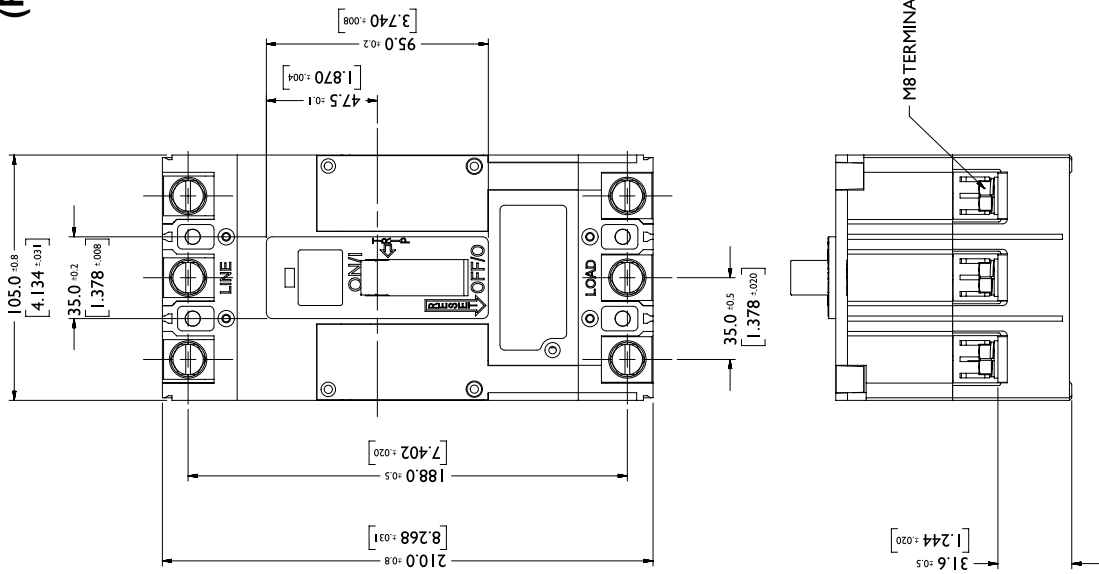
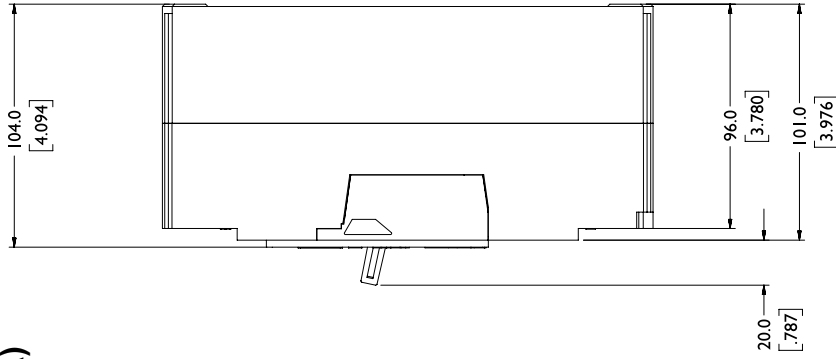


TOLERANCE = 0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)



J25S FRAME DIMENSIONAL DRAWINGS

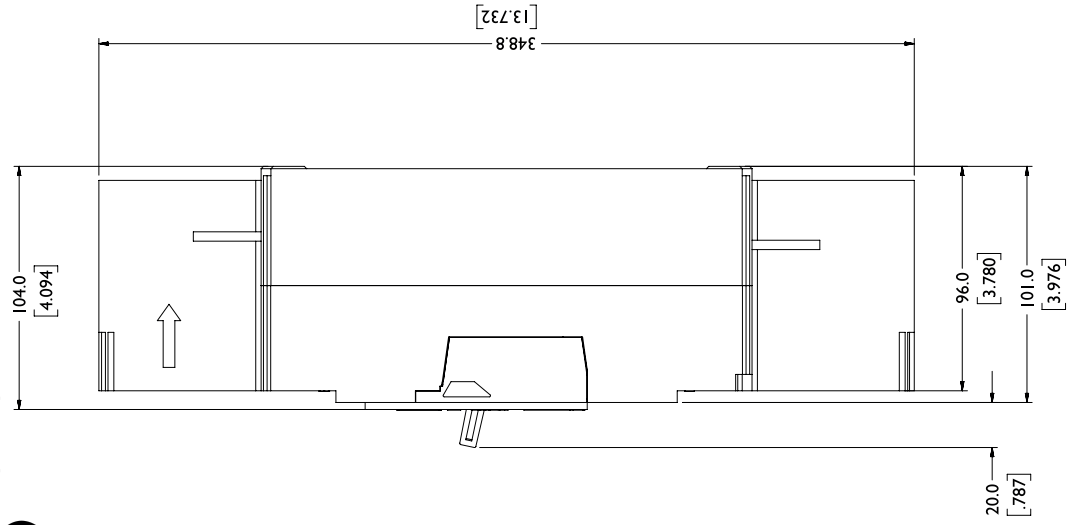
**LUG CONNECTING UNIT
(RATINGS 10 A TO 150 A)**



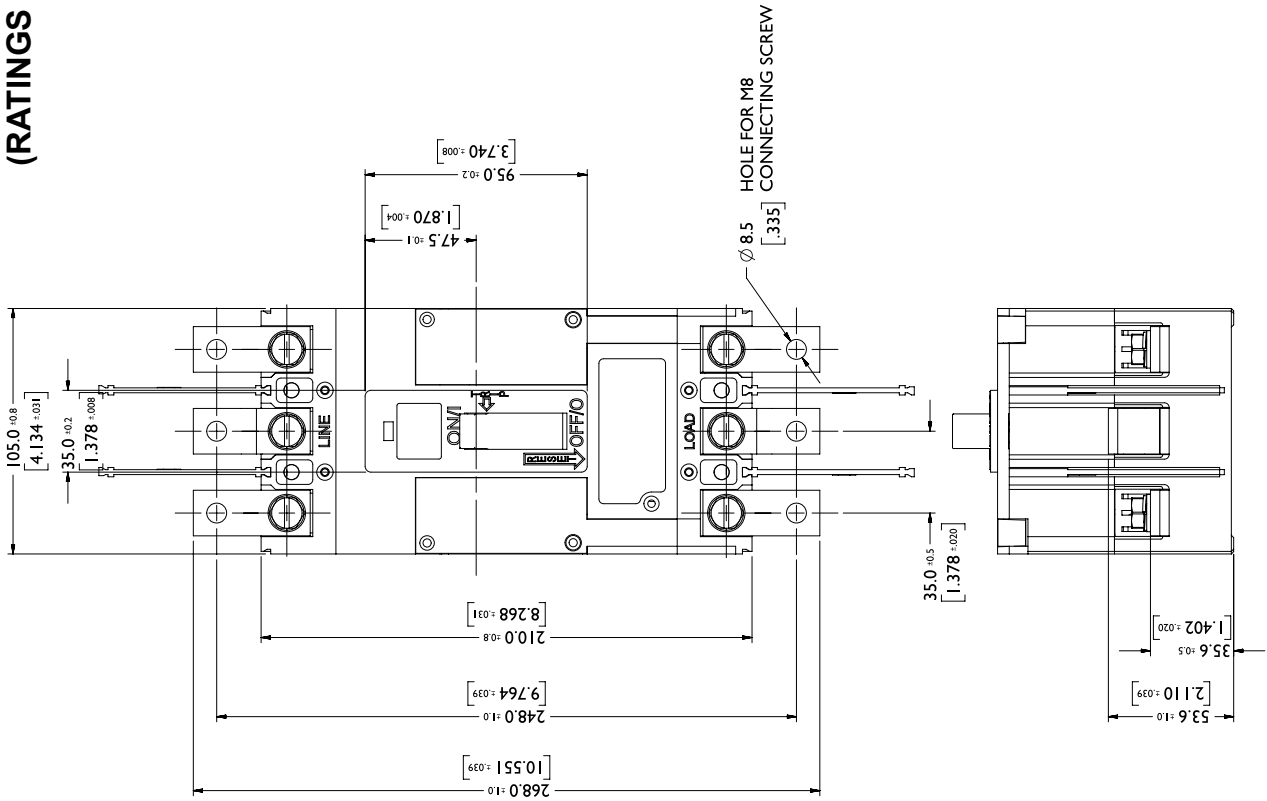
TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)

J25S FRAME DIMENSIONAL DRAWINGS

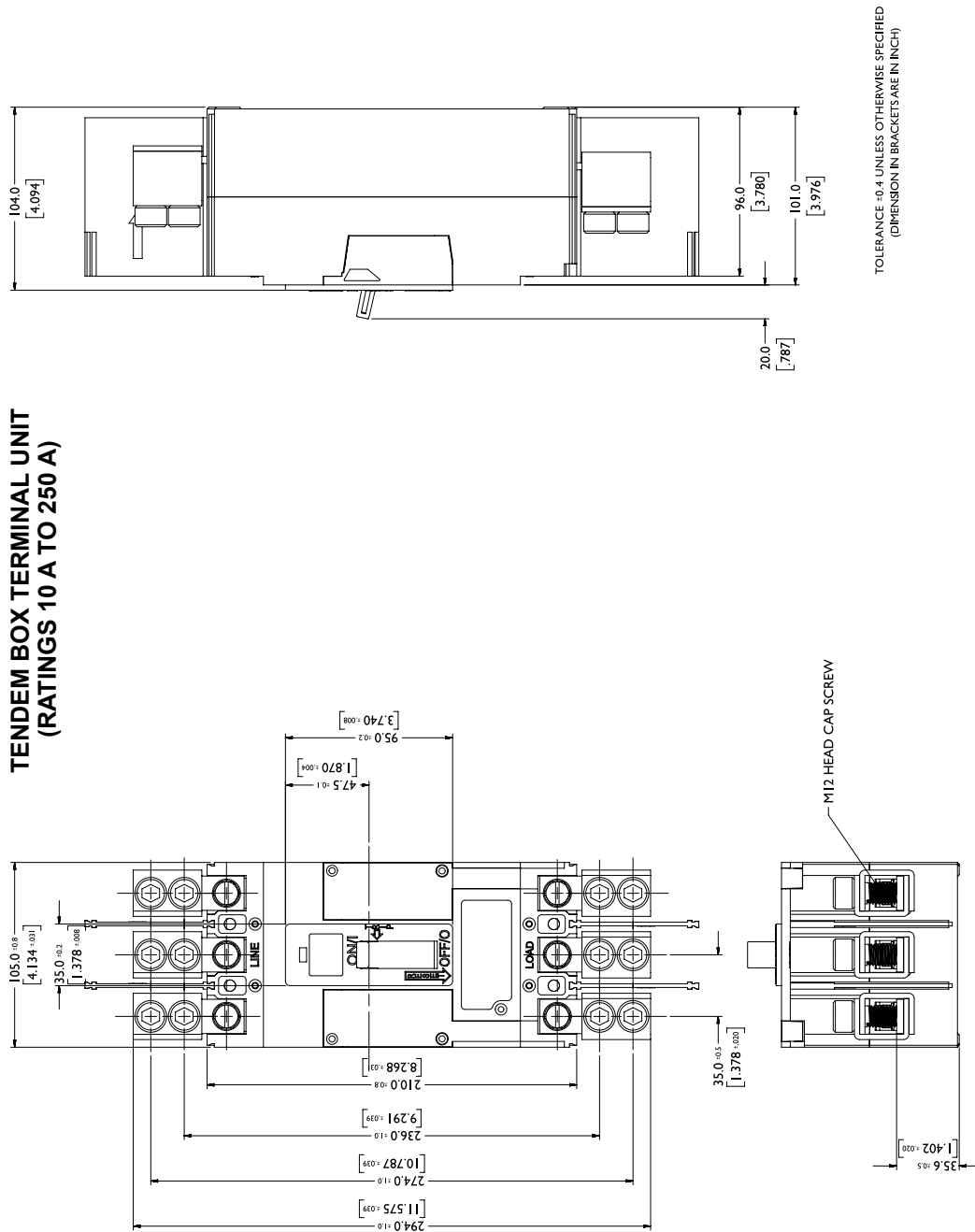
**EXTENDED LUG CONNECTING UNIT (G4B)
(RATINGS 160 A TO 250 A)**



TOLERANCE ±0.4 UNLESS OTHERWISE SPECIFIED
(DIMENSION IN BRACKETS ARE IN INCH)



J25S FRAME DIMENSIONAL DRAWINGS



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