

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

35 & 60 Series - Mercury Displacement Relay

Up to 3PST, 35 or 60 Amp

E52197

The 35 & 60 series products are mercury displacement relays. Sealed tubes containing liquid mercury assure contact surfaces are freshly replenished with every contact movement. Contact resistance is among the lowest available for any electromechanical relay. The M35 series offers superior long life performance. Products are available with 1, 2, or 3 poles rated 35 amps. Contacts can be normally open or normally closed.

Optional DIN rail adaptors – 1 pole = 16-MDRDIN-1, 2 or 3 pole = 16-MDRDIN-2/3

GENERAL SPECIFICATIONS (@ 25° C)

Contacts:	***35***	***60***
Contact Configuration	Up to 3PST	Up to 3PST
Contact Material	Liquid Mercury	Liquid Mercury
Contact Rating		
120 / 240VAC Resistive	35 Amp	60 Amp
28VDC Resistive	35 Amp	60 Amp
Motor 120VAC 1 Phase	5Hp	5Hp
Motor 240VAC 1 Phase	5Hp	10Hp
Contact Resistance, Initial	50 milliohms max @ 6VDC	50 milliohms max @ 6VDC
Coil:		
Coils Available	AC and DC	AC and DC
Nominal Coil Power	7 to 28VA 3 to 9W	7 to 28VA 3 to 9W
Input Voltage Tolerance - AC	85% to 110% of nominal	85% to 110% of nominal
Input Voltage Tolerance - DC	80% to 110% of nominal	80% to 110% of nominal
Drop-out voltge	10% of nominal	10% of nominal
Duty	Continuous	Continuous
Timing:		
Operate Time (max)	50ms	50ms
Release Time (max)	80ms	80ms
Dielectric Strength:		
Across Open Contacts	2650 VRMS	2650 VRMS
Between Mutally Insulated Points	2650 VRMS	2650 VRMS
Insulation Resistance	1000 megohms @ 500VAC	1000 megohms @ 500VAC
Temperature:		
Operating	-34 to 74°C (-30 to 165°F)	-34 to 74°C (-30 to 165°F)
Storage	-40 to 105°C (-40 to 221°F)	-40 to 105°C (-40 to 221°F)
Life Expectancy:		
Electrical (full load operations)	250,000	250,000
Mechanical (no load operations)	5,000,000	5,000,000
Miscellaneous:		
Mounting Position	Vertical within 10 degrees	Vertical within 10 degrees
Enclosure	Hermetically Sealed	Hermetically Sealed
Weight	Varies	Varies
Recom'd Min. Wire Size for rated load	#6 Copper	#4 Copper
Recom'd Min. Torque on Pwr. Terminals	36 in./lbs	50in./lbs

*Material safety data sheet available on request
*Dispose of properly

www.struthers-dunn.com (843) 346-4427

April 2018

Power Relays

30 - 300 Amp

35 Series



1 Pole



2 Pole



3 Pole

60 Series



1 Pole



2 Pole



3 Pole

35 & 60 Series - Mercury Displacement Relay

Up to 3PST, 35 or 60 Amp

CAUTION: Overheating of power terminals may occur if wires are not tightened to minimum torque values resulting in catastrophic failure of the relay tube.

Ordering Code **M35** **A** **120VAC**

Series
M35 Series = 35 Amp
M60 Series = 60 Amp

Contact Arrangement
A (1 N.O. tube)
AA (2 N.O. tube)
A AA (3 N.O. tube)
B (1 N.C. tube)
BB (2 N.C. tube)
BBB (3 N.C. tube)

Coil Voltage
AC: 12, 24, 120, 208, 240, 277, 480 (Add VAC)
DC: 12, 24, 48, 115-125, 250 (Add VDC)

Contact Ratings for 35 Series

Voltage	*Phase*		*HP*		*Motor* Amp		*Resistive* Amp	*Tungsten*
			1Ø	3Ø	1Ø	3Ø		
120VAC	1Ø	3Ø	3.0*	5.0*	34.0	30.0	35*	35*
240VAC	1Ø	3Ø	5.0*	7.5*	28.0	19.0	35*	17
480VAC	1Ø	3Ø	5.0*	10.0*	14.0	14.0	35*	9
600VAC	1Ø	3Ø	5.0 *	10.0*	11.2	11.0	25**	7
24VDC	DC		0.5		27.0		35*	35*
48VDC	DC		0.5		13.5		35*	35*
125VDC	DC		0.5		5.2		16*	16*
250VDC	DC		0.5		2.6		12*	12*

Contact Ratings for 60 Series

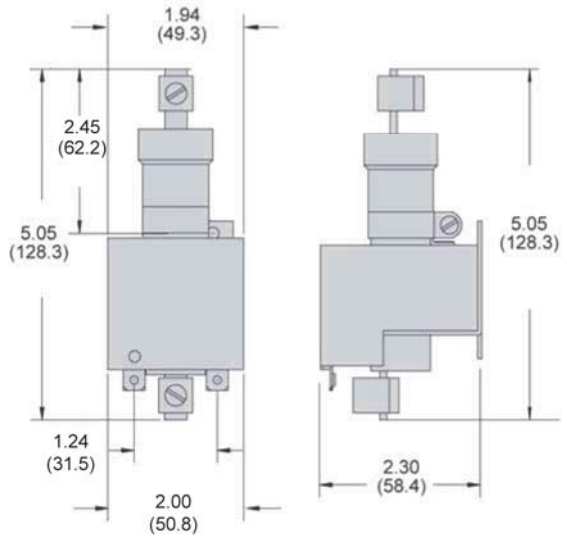
Voltage	*Phase*		*HP*		*Motor* Amp		*Resistive* Amp	*Tungsten* Amp	
			1Ø	3Ø	1Ø	3Ø		"A" (N.O.)	"B" (N.C.)
120VAC	1Ø	3Ø	3.0*	5.0*	34.0	30.0	60*	60*	45'
240VAC	1Ø	3Ø	5.0*	10.0*	28.0	28.0	60*	30.0	22.5
480VAC	1Ø	3Ø	7.5*	15.0*	21.0	21.0	60*	15.0	11.2
600VAC	1Ø	3Ø	7.5 *	15.0*	16.0	17.0	50**	12.0	9.0
24VDC	DC		0.75		39.0		60*	50.0*	50.0*
48VDC	DC		0.75		19.5		60*	50.0*	50.0*
125VDC	DC		0.75		7.4		40*	40.0*	40.0*
250VDC	DC		0.75		3.7		20*	20.0*	20.0*

*UL & CSA Listed

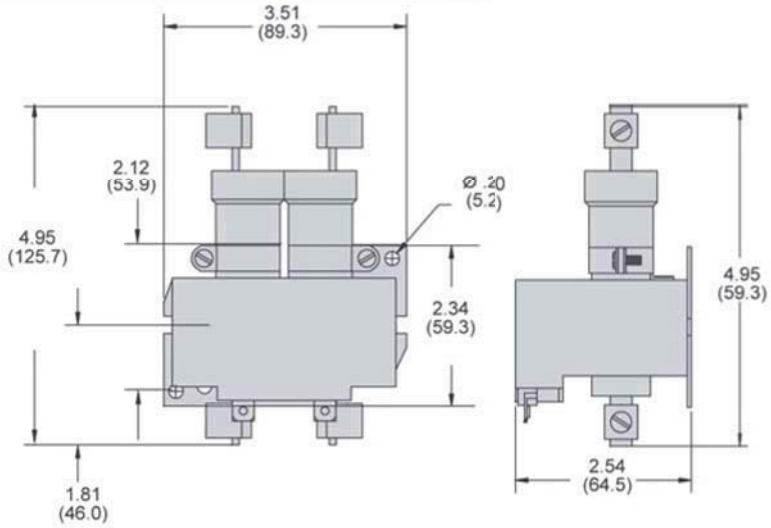
Max Outline Dimensions

Dimensions shown in inches & (millimeters)

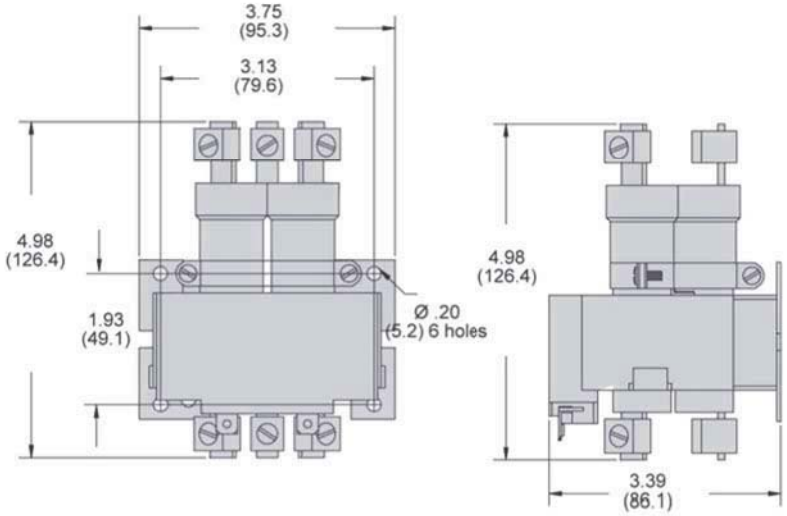
1 Pole



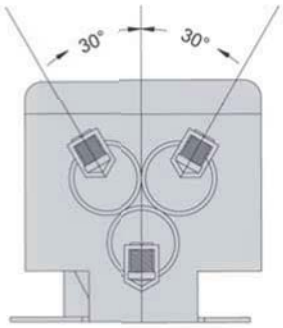
2 Pole



3 Pole



3 Pole Top View



***Normally closed tubes (B style) sit lower in coil assemblies**



Recommended
Mounting Position ± 10°

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP