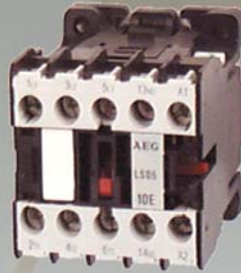


Type LS05
**MINI POWER RELAY
MINI CONTACTOR**



Type LS07
**MINI POWER RELAY
MINI CONTACTOR**



Type XLS05
MINI STARTER



MINI CONTACTORS STARTERS POWER RELAYS

POSITIVE GUIDED RELAYS & CONTACTORS

SERIES LS07 SPECIFICATIONS

- ✓ **16 Amp Resistive (UL)**
AC-1 (16 AMP 600 Volt)
- ✓ **Mechanical Life Operations**
10,000,000
- ✓ **Maximum HP Ratings**
3 Phase
460 Volt 3HP CE

SERIES LS05 SPECIFICATIONS

- ✓ **15 Amp Inductive (UL)**
AC-1 (20 AMP 600 Volt)
- ✓ **Mechanical Life Operations**
AC 10,000,000
- ✓ **Maximum HP Ratings**
3 Phase
460 Volt 5HP

Connection Options LS07

- Pressure Wire Terminals
 - Spade (Plug-On)
 - PC Board (pin terminal)
- Low Coil Burden 1.2 Watt**

Internationally Accepted

- CE, UL, IEC, S +, BS, VDE, CSA

Overload Relay Type B05

- Ambient Temperature Compensated
- Three Pole Plug-on Separate Mount
- Differential Single Phasing Protection

Enclosures

- M1 - General Purpose
- M12 - Dust Tight
- 4X - Non Metal
- Water & Dust Tight



**ELECTRICAL & ELECTRONIC
CONTROLS, INC.**

**3881 DANBURY ROAD
BREWSTER, NY 10509**

845-278-5777 FAX 845-278-5444

E-MAIL: info@eecontrols.com

**EE CONTROLS, LTD
17 STEWART COURT
ORANGEVILLE, ONTARIO
CANADA L9W 3Z9**

519-941-6845 FAX 519-940-0514

E-Mail: infoeecontrols@on.aibn.com

MINI CONTACTOR



Type LS05 Ratings Maximum HP Ratings

200 Volt	3 HP
230 Volt	3 HP
460 Volt	5 HP
600 Volt	5 HP
1 Phase	
110 Volt	1/2 HP
220 Volt	1.5 HP
15 AMP INDUCTIVE	
AC-1	20 Amp
*NOTE: 20 Amp General Purpose.	



OPEN 3 POLE	ENCLOSED		Auxiliary Contacts	
	NEMA 1 General Purpose	NEMA 4X Outdoor Dust Tight	NO	NC
•LS05.10-★0	LS05.10-★1	LS05.10-★4X	1	0
•LS05.01-★0 \$40 List	LS05.01-★1 \$109 List	LS05.01-★4X \$132 List	0	1
••LS05.10F.★0 \$45 List			1	0
• Standard Screw Down Pressure Plate Terminal		•• Spade Terminal		
SXLS05-★0-★★ \$89 List	SXLS05-★1-★★ \$161 List	SXLS05-★4X-★★ \$184 List	1	0
XLS05-★0-★★ \$89 List	XLS05-★1-★★ \$161 List	XLS05-★4X-★★ \$184 List	1	0
RLS05.10-★0	RLS05.10-★1	RLS05.10-★4X	1	0
RLS05.01-★0 \$116 List	RLS05.01-★1 \$185 List	RLS05.01-★4X \$238 List	0	1
SRXLS05.11-★0-★★ \$171 List	SRXLS05.11-★1-★★ \$243 List	SRXLS05.11-★4X-★★ \$296 List	1	1
RXLS05.11-★0-★★ \$171 List	RXLS05.11-★1-★★ \$243 List	RXLS05.11-★4X-★★ \$296 List	1	1
OPEN 4 POLE				
•LS05-4.00-★0 \$40 List	LS05-4.00-★1 \$109 List	LS05-4.00-★4X \$132 List	0	0

MINI STARTER

Single Phase

Three Phase

MINI REVERSING CONTACTOR

Three Phase

MINI REVERSING STARTER

Single Phase

Three Phase

Four Poles

★ COIL VOLTAGE SUFFIX

AC★	60HZ	50HZ	
-A	120V	110V	
-C	208V/230V	220V	
-E	480V	440V	
-F	600V	550V	
-D		380V	
-G	24V	22V	
-H	280V/277V	240V	
DC★ •			
-MSW	12VDC		•Price Addition for DC Coil. \$10
-NSW	24VDC		
-OSW	48VDC		
-PSW	120VDC		
-RSW	220VDC		

Deduction for less wiring - \$20 list price from reversing contactor and reversing starter, add -LW to part #.

Part# example: RXLS05.11-A1-NN-LW \$223. Reversing Starter, 120V coil 10-14 AMP overload, in NEMA 1 Box, less wiring.

Dimensions: Contactor, W-1.8", H-1.9", Deep-2.2".
Starter, W-1.8", H-3.8", Deep-2.2".

TYPE B05

OVERLOAD RELAY

TYPE HS AUXILIARY

Side Mount Front Mount



Type B05 Overload has 1N.C. pilot circuit contact included. If a N.O. additional contact is needed, P/N HB05-143 includes a N.O. Alarm Contact. See Below.

LS05 Accessory Kits

Mechanical Interlock LS05-VB05 \$6
Auxiliary Contacts 10 Amp 600V

Side Mount	Normally Open	Normally Closed	List
	1	0	
0	1	HS05.01	\$10
2	0	HS05.20	\$13
1	1	HS05.11	\$13
0	2	HS05.02	\$13
0	1	HS05.01-001	\$13
1	2	HS05.12	\$16
Front Mount			
0	4	HS05.04	\$18
1	3	HS05.13	\$18
2	2	HS05.22	\$18
3	1	HS05.31	\$18
4	0	HS05.40	\$18
Front Mount (with spade terminal)			
0	1	HS05.01F	\$10
1	2	HS05.12F	\$16
Timing Module			
	12-60 VAC	LS05-EV05-60	\$66
	90-240 VAC	LS05-EV05-240	\$66

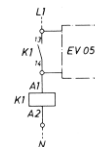


Diagram with time delay module type EV 05

Type EV05 Timer
Timer, delays coil operation.
Adjustable 0.5-60.sec.

TYPE SH05

MINI RELAYS

A.C. OPERATED

10 pole maximum with auxiliary



With Pressure Wire Screws Terminals

	Contacts		AC Operated List
	NO	NC	List
SH05.22-*	2	2	\$40
SH05.31-*	3	1	\$40
SH05.40-*	4	0	\$40

With Flat Plug (Spade) Connectors

	Contacts		AC Operated List
	NO	NC	List
SH05:22F*-★	2	2	\$45
SH05:31F*-★	3	1	\$45
SH05:40F*-★	4	0	\$45

★★ OVERLOAD

Suffix ★★	Amp Range	Complete Plug-On	List
-A	0.11-0.17	B05-A	\$55
-B	0.17-0.26	B05-B	\$55
-C	0.26-0.43	B05-C	\$55
-D	0.43-0.65	B05-D	\$55
-E	0.65- 1	B05-E	\$55
-F	0.85-1.3	B05-F	\$55
-G	1.1-1.6	B05-G	\$55
-GN	1.35-2	B05-GN	\$55
-H	1.7-2.4	B05-H	\$55
-IN	2.2-3.2	B05-IN	\$55
-JN	3-4.7	B05-JN	\$55
-K	4-6.3	B05-K	\$55
-L	5.5-8	B05-L	\$55
-M	7.5-10.5	B05-M	\$55
-NN	10-14	B05-NN	\$55

RESET EXTENDER

HB05-143 REQUIRED for overload use with external reset operation by reset plunger. Includes

N.O. Aux. Alarm Contact. #HB05-143 \$13.00 List

OVERLOAD ADAPTER

Terminal for Separate Mount B05-141-142 \$13.00 List
(DIN Rail or Panel mountable)

Surge Suppressor 12-60 VAC LS05-EB05-60 \$14
72-240 VAC LS05-EB05-240 \$14

2 Parallel

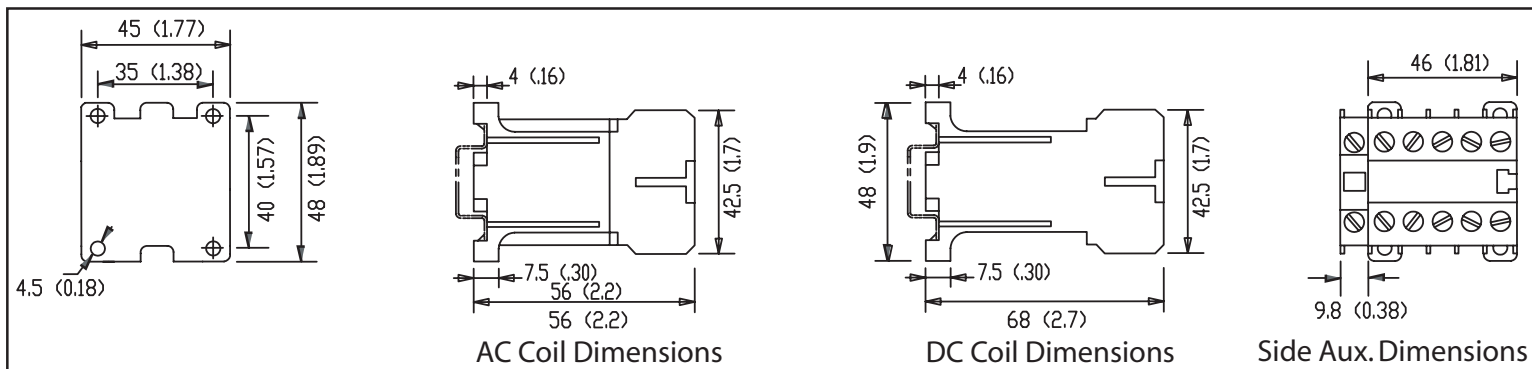
Pole Connector LS05-EB05 \$ 6

Spare Coils LS05-COIL-★ \$20

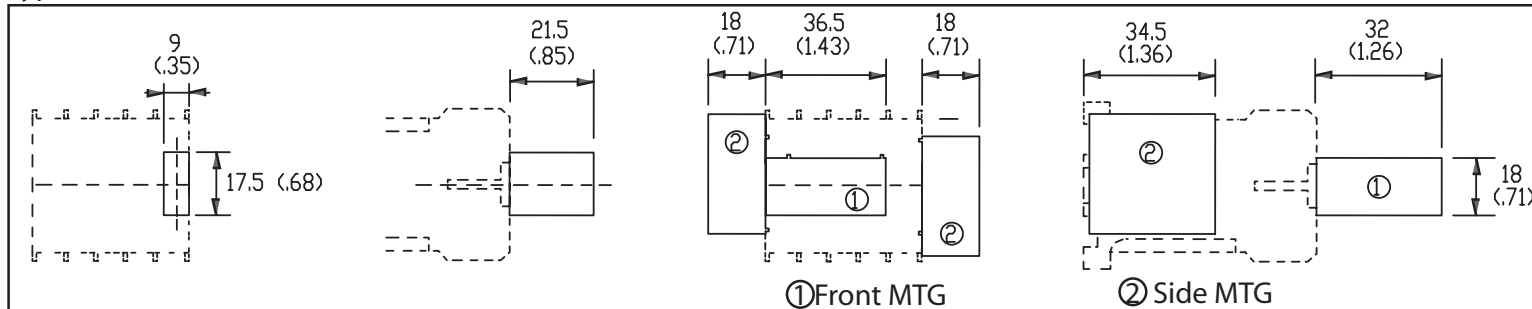
★ See coil voltage suffix

Discount Schedule ST

Dimensions LS05, SH05, B05 Contactors & Overloads (AC/DC)

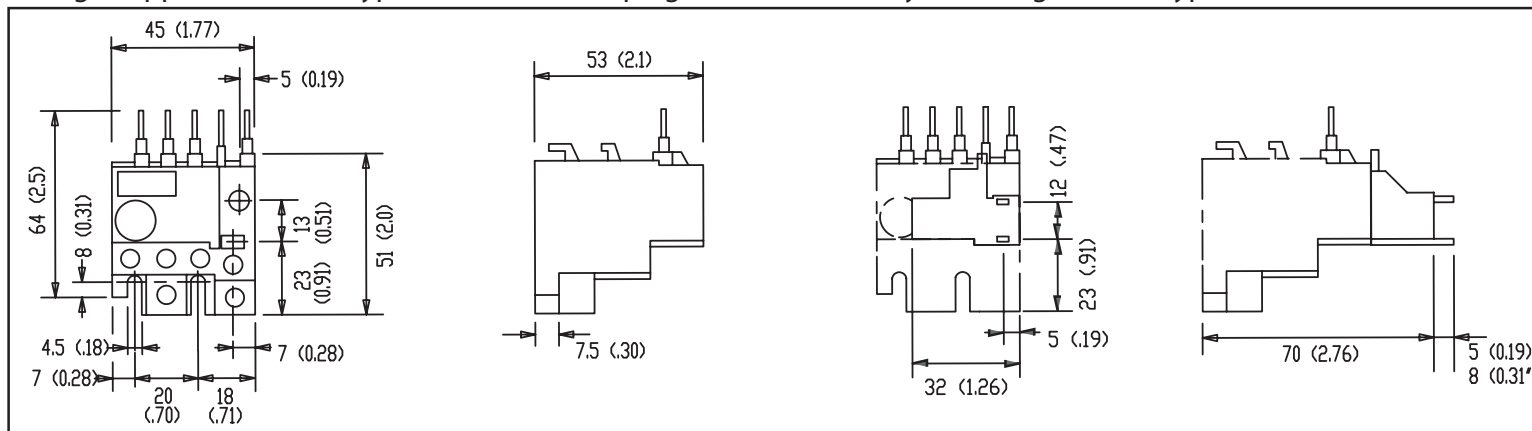


Type LS05, SH05, and HS05 (frame size I, Lateral) with screw terminals.

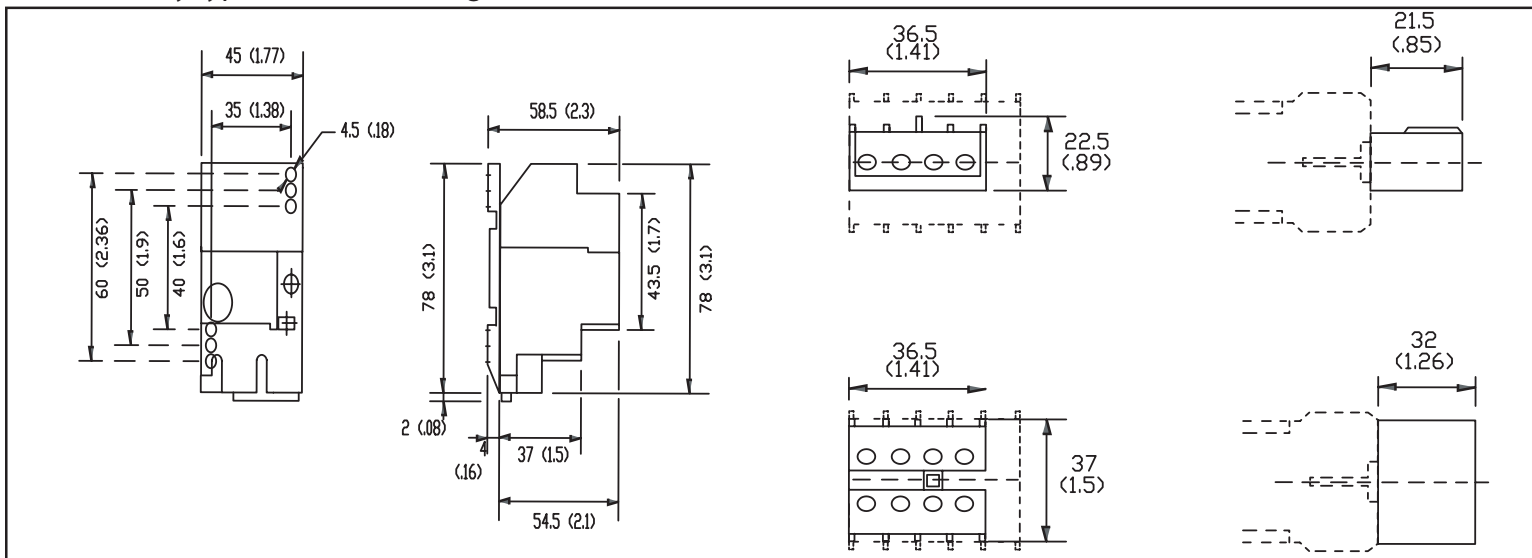


Voltage Suppression module type EB 05 for frontal plug on.

Delayed closing module Type EV05



Overload relay type B05 for mounting on contactors



H.P. RATING			AMPS (OPEN) Resistive	Cat. No.	OPEN	TYPE M1 NEMA1	TYPE 4X ▶ NEMA 4X	Auxiliary Contacts	
115V	230V		<u>Single Phase Starter</u>		LIST	LIST	LIST	NO	NC
1	2		16A Non Reversing	SXLS07.10-	-★0-★★ \$ 91	-★1-★★ \$163	-★4X-★★ \$186	1	-
1	2		16A Reversing ◀	SRXLS07.10-	-★0-★★ 145	-★1-★★ 217	-★4X-★★ 270	1	-
208V	230V	460V	<u>Three Phase Starter</u>		List Price includes three heaters				
3	3	3	16A Non Reversing	XLS07.10-	-★0-★★ \$ 91	-★1-★★ \$163	-★4X-★★ \$186	1	-
3	3	3	16A Reversing ◀	RXLS07.10-	-★0-★★ 145	-★1-★★ 217	-★4X-★★ 270	1	-
3	3	3	16A Reversing ◀	RXLS07.01-	-★0-★★ 145	-★1-★★ 217	-★4X-★★ 270	-	1

▶ **TYPE 4X ENCLOSED STARTERS.** Type XLS starters are UL/CSA Listed starters enclosed in type 4X U.L. Listed enclosures. Type 4X enclosures are designed for outdoor/hose down/dust tight applications and are non-metal corrosion resistant.

Option: Contactors can be supplied with plug-on spade connectors or terminal wire pin connectors.

EXAMPLE: Catalog No. XLS07 - **A** - **E**
(Full Voltage Starter **A** - 120V Coil, **E** - .85 - 1.3 Amp Overload)

Note: RXLS07 only available in AC coil voltage. For DC mini reversing see RXLS05 Page 72

◀ All Mini Reversing units are supplied less wiring. Add \$25.00 list for factory wiring. Add suffix -W to catalog number.



★ COIL VOLTAGE SUFFIX

AC★	60HZ	50HZ
-A	120V	110V
-C	208/230V	220V
-D		380V
-E	480V	440V
-G	24V	22V

DC★ - Add \$10 List per coil

-MSW	12VDC
-NSW	24VDC
-OSW	48VDC
-PSW	120VDC
-RSW	220VDC

• SW Single Winding DC Power Plant.
DC Coils are not available in RLS07.

★★ OVERLOAD

Suffix ★★	Amp Range	Complete Plug-On	List
-A	0.11-0.17	B05-A	\$55
-B	0.17-0.26	B05-B	\$55
-C	0.26-0.43	B05-C	\$55
-D	0.43-0.65	B05-D	\$55
-E	0.65-1	B05-E	\$55
-F	0.85-1.3	B05-F	\$55
-G	1.1-1.6	B05-G	\$55
-GN	1.35-2	B05-GN	\$55
-H	1.7-2.4	B05-H	\$55
-IN	2.2-3.2	B05-IN	\$55
-JN	3-4.7	B05-JN	\$55
-K	4-6.3	B05-K	\$55
-L	5.5-8	B05-L	\$55
-M	7.5-10.5	B05-M	\$55
-NN	10-14	B05-NN	\$55

STANDARD FEATURES

TYPE B05 OVERLOADS - The *Reliable* Motor Protectors

- Direct Heated Bimetals
- Ambient Compensated
- Plug-On O.L. Block
- Optional Separate Mount
- NO & NC Contacts
- 600 Volt Rated
- Sealable Precision Setting
- Protected Heaters
- 100% Factory Set
- NEMA Class 10

Technical Data

Rated insulation voltage 600V, Resistive Amps 16A

Mechanical life endurance For AC operation: 4 million operation cycles

For DC operation: 10 million operation cycles

AC1 duty Resistive Admissible operational frequency: 50 operations/hour

Contact life expectation under full load and rated operational current: 150,000 ops (16 Amp)

AC3 duty Motor Load

Allowed frequency of operations at full load and uninterupted duty: 3000 ops/h

Contact life expectation under full load at rated power and AC 3 duty: 400,000 operations

AC 11 duty Heavy Pilot Duty 10 Amp

Rated make/break capacity up to 200V 60A

Allowed frequency of operations at full load and uninterupted duty: 600 ops/h

DC 11 duty Standard Duty

Short Circuit Protection Max. back-up fuse: 16A slow

Coil Ratings

For AC operation: Pick-up/sealing 16VA/4.9VA (voltage tolerance -25% - +10%)

For DC operation: Pick-up/sealing 2.4W (voltage tolerance -15% - +10%)
(for 24V: 1.2W for operating range 0.8 to 1.7V)
(for special version consult factory)

Switching times for 1.0V

for AC operation	closing delay	9 to 30 millisecs	opening delay	5 to 25 millisecs
for DC operation	closing delay	10 to 35 millisecs	opening delay	2 to 8 millisecs

MINI OVERLOADS



B05-**-**



HB05-143

Required for external reset

Plug-On overload Unit

(Plug-On overload included as standard when complete starter is purchased.)

#B05-★★ \$55 LIST

Separate Mount O.L. Adaptor

#B05-141-142 \$13 LIST

Plate Adaptor for assembling O.L. Type #B05 to Minicontactor LS07

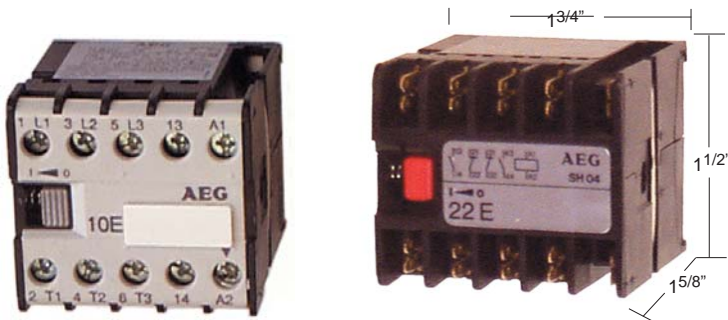
(Plate adaptor is included as standard when complete starter is purchased.)

#B05-LS07-ADPT \$1.50 LIST

Plate Adaptor is not needed when XLS07/B05 Starter is DIN Rail mounted.

HB05-143 REQUIRED for overload use with external reset operation by reset plunger.

N.O. Aux. Alarm Contact HB05 - 143 \$13.00 List



POSITIVE GUIDED TYPE SH04 RELAYS AND TYPE LS07 CONTACTORS

Certified as Positive Guided
AEG Relays and Contactors

1. Independent Test Lab Certified per IEC 947-5-1
2. 100% Quality Tested per IEC 947-5-1

H.P. RATING					AMPS (OPEN) Resistive	Cat. No.	OPEN LIST	TYPE M1 NEMA1 LIST	TYPE 4X ▶ LIST	Auxiliary Contacts	
1 Phase		3 Phase								NO	NC
115V	230V	208V	230V	460V							
AC OPERATED MINI CONTACTOR TYPE LS07											
With Pressure Wire Screw Terminals											
1	2	3	3	3	16A	LS07.10-	-★0 \$36	-★1 \$105	-★4X \$128	1	-
1	2	3	3	3	16A	LS07.01-	-★0 36	-★1 105	-★4X 128	-	1
With Flat Plug (Spade) Connectors											
1	2	3	3	3	16A	LS07F.10-	-★0 \$36				
1	2	3	3	3	16A	LS07F.01-	-★0 36				
NOTE: In Catalog No. .10 indicates 1-NO Contact; .01 indicates 1-NC Contact.											
CONTACT CODE					POWER					AUXILIARIES	
					N.O.					N.O.	
					N.C.					N.C.	
LS07.10					3					1	
LS07.01					3					-	
LS07.22					2					-	
LS07.40					4					-	
SPADE CONNECTOR (Single or Double Spade) Check with factory for cost.											
★COIL VOLTAGE SUFFIX											
AC★	60HZ	50HZ							DC★		
-A	120V	110V							-MSW		12VDC
-C	208/230V	220V							-NSW		24VDC
-D		380V							-OSW		48VDC
-E	480V	440V							-PSW		120VDC
-G	24V	22V							-RSW		220VDC
										+ \$10 LIST for DC Coil	
• SW Single Winding DC Power Plant											
DC OPERATED MINI CONTACTOR TYPE LS07											
3 Pole Non-Reversing											
With Pressure Wire Screw Terminals											
1	2	3	3	3	16A	LS07.10-	-★0 \$46				
1	2	3	3	3	16A	LS07.01-	-★0 46				
With Flat Plug (Spade) Connectors											
1	2	3	3	3	16A	LS07F.10-	-★0 \$46				
1	2	3	3	3	16A	LS07F.01-	-★0 46				

▶ **TYPE 4X ENCLOSED STARTERS.** Type XLS starters are UL/CSA Listed starters enclosed in type 4X U.L. Listed enclosures. Type 4X enclosures are designed for outdoor/hose down/dust tight applications and are non-metal corrosion resistant.

DESCRIPTION

Minicontactor Type LS07, designed for motor control, and distinct *small* size. As such, they are recommended for space saving in industrial control, electronic control and distribution systems.

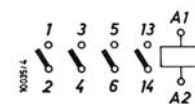
The **Type LS07 Minicontactor** has been proven dependable on both three phase and single

phase systems when controlling motor loads. LS07 is particularly recommended for metal and woodworking machines, for textile and construction machinery and other commercial and industrial applications.

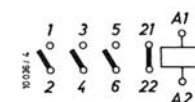
Other loads for minicontactors are resistive, such as heating and lighting circuits, or inductive loads repre-

sented by solenoid valves and clutch couplings.

CONTACT CONFIGURATION



10 E
Type LS 07.10



01 E
Type LS 07.01

For TYPE LS05 - MINI Contactor, 20 Amp 600V, see LS05 Miniature Contactor System.

Type SH05 Mini Relays are designed for compact applications. The SH05 versatile Relay Accessories provide side mount as well as top mount auxiliaries, voltage suppressors, electronic timers and the means to mechanically interlock two relays. The combination of added auxiliaries give the adaptability to operate up to 10 poles Max.

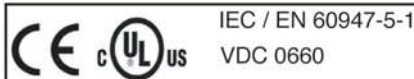


Technical Data

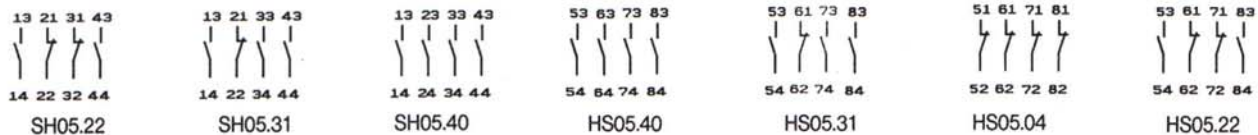
(SH05 Relay)

- 16 Amps thermal Ith
- Operational temperature (-40 c - + 60 c)
- Rated insulation voltage 660v
- Mechanical life 10,000,000
- Permissible switching frequency 1,200 opt hour
- Terminal torque- 0.8Nm (7 lb in)
- Wire size capability - standard 0.75-2,5(x2) 18 -14 gage
solid 0.75 - 2.(2x) 18 - 14 gage
- Coil power consumption (AC) pick up -26VA
sealed - 4 va
- Coil operating limits - (DC) pick up 3-watts
sealed 3 - watts
- * Min operational power 5MA 17V
- *(Special interface version available 1.2 watt 24 VDC.

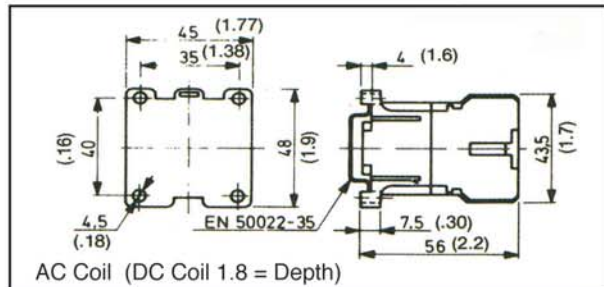
Approvals



Contact Configuration



Dimensional Data



External Auxiliary Contacts

Technical Data

10 Amp Ith (thermal)
Rated voltage and rated current Ue - Ie (IEC)

AC-15	according to IEC 60947	110/120V - 6A 220/240V - 6A 380/400V - 3A 500V - 1A 660/680V - 1A
	according to UL,CSA	A600
DC-13	according to IEC 60947	24V - 4A 48V - 2A 110V - 0.7A 220V - 0.3A 440V - 0.1A
	according to UL,CSA	Q600



SH05 POSITIVE GUIDED DESIGN 16A MINI RELAYS



MINI RELAYS - POSITIVE GUIDED DESIGN FOR SAFETY CIRCUITS





TYPE SH05 RELAY

16 Amps lth

AC/DC OPERATED RELAYS

With Pressure Wire Screw Terminals				
16 l th Amps	Contacts		AC Operated	DC Operated
	NO	NC	List	List
SH05. 22-*	2	2	\$ 40	\$ 50
SH05. 31-*	3	1	\$ 40	\$ 50
SH05. 40-*	4	0	\$ 40	\$ 50

Timers	Voltage	Part Number	List
	12-60 VAC	LS05-EV05-60	\$66
	90-240 VAC	LS05-EV05-240	\$66
Timer Module can be top mounted or side mounted to any SH05/LS05 Relay/Contactor.(AC/DC)			

Jumpers	Part Number	List Each
	LS05 - EB05	\$ 6
Parallel Pole Connector		

* Coil Voltage Suffix		
AC*	60HZ	50HZ
-A	120V	110V
-C	208V/230V	220V
-E	480 V	440V
-F	600V	550V
-D		380V
-G	24V	22V
-H	280V/277V	240V
DC*		
-MSW	12VDC	
-NSW	24VDC	
-OSW	48VDC	
-PSW	120VDC	
-RSW	220VDC	


Ordering - Replace astric * with coil voltage suffix from suffix chart below.


Part# Example:

2 N.O./N.C. 16 Amp Relay 120 Vac Coil


Part # SH05. 22-A

With Flat Plug (spade) Connectors				
	Contacts		AC Operated	DC Operated
	NO	NC	List	List
SH05 F.22-*	2	2	\$ 45	\$ 55
SH05 F.31-*	3	1	\$ 45	\$ 55
SH05 F.40-*	4	0	\$ 45	\$ 55

Surge Suppressors	Part Number	List Each	
	12 - 60 VAC	LS05 - EB05 - 60	\$14
	72 - 240 VAC	LS05 - EB05 - 240	\$14

Replacement Coils	Part Number	List Each
	LK-C130 - *	\$ 20
* Replace with Coil Voltage Suffix From Chart above.		

Auxiliaries (A600UL)

	NORMALLY OPEN	NORMALLY Closed	Part #	LIST
		1 0	0 1	HSO5.10 HSO5.01
Side Mount Auxiliary	2	0	HSO5.20	\$13
	1	1	HSO5.11	\$13
	0	2	HSO5.02	\$13
	0	1	HSO5.01-001	\$13
	1	2	HSO5.12	\$16
	0	4	HSO5.04	\$18
	1	3	HSO5.13	\$18
	2	2	HSO5.22	\$18
Top Mount Auxiliary	3	1	HSO5.31	\$18
	4	0	HSO5.40	\$18



SH5 Positive Guided 20A Relays (20 Amp)



20 Amp AC & DC Positive Guided Relays Space Saving Dimensions



**Positive Guided
Type SH5 Relays (4 pole)**

User Benefits

SH5 Relays are loaded with features permitting convenient to installation and allow more flexible configurations.

They conform to both international standards and US approvals. SH5 Relays included dual (US / European) marking to assure global acceptance.

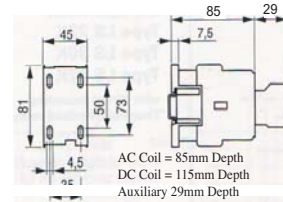
Available Worldwide

Recognized as one of the leading heavy duty industrial product lines. Type SH relays are available in over 100 countries including every industrial nation.

Industry Accepted & Preferred

Reliability demanding industries steel, oil, cement, chemical, automotive, widely use and demand type SH controls in their systems.

Positive Guided Relays



Type

For critical safety circuits, self checking duplicate circuits can be required. The following type SH multipole relays have positive guided contacts. This "Positive Guided Design" Assures that no Normally Open contacts may be simultaneously closed with Normally closed contacts. In the event that a normally open contact welds in, the Normally closed contact will have a minimum Gap of 0.5mm.

"Positive Guided" contacts are not positive break or positive opening contacts.

* Added Auxiliaries to SH5 relays DO NOT meet positive guided safety circuit standards.
*Per the IEC safety standard (IEC 947-5-1)

Part # with AC Coil * Add coil suffix	Poles		AC Coil Operation	DC Coil Operation
	NO	NC		
Basic 4 pole				
SH5.40-*	4	0	\$62	\$90
SH5.31-*	3	1	\$62	\$90
SH5.04-*	0	4	\$62	\$90
SH5.22-*	2	2	\$62	\$90
Adder poles Auxiliaries 10 Amps 4pole(top mount) (A600) Max Aux.				
LK-HS7K.10	1	0	\$12	\$12
LK-HS7K.01	0	1	\$12	\$12
*Auxiliaries not positive guided				
Auxiliaries (Side Mount) 10 Amps(A600)				
LK-HS8K.11	1	1	\$22	\$22
LK-HS8K.20	2	0	\$22	\$22
*Auxiliaries not positive guided				

Contact Rating Per Pole		
Max Voltage	AC-15 Amperes Rating	CONTINUOUS CARRYING CURRENT
AC-15		
230	10	20 AMP 1 th
400	10	
480	5	
600	4	
DC - 13	Amp Ratings	
24 V	6A	20 AMP 1 th
48 V	4A	
110 V	2A	
220 V	0.7A	
440 V	0.35A	

*Coil Voltage Suffix			
AC	60Hz	50Hz	DC
- A	120 V	110 V	- MSW 12VDC
- C	208 / 230 V	220 V	- NSW 24VDC
- D		380 V	- OSW 48VDC
- E	480 V	440 V	- PSW 120VDC
- F	600 V	550 V	- RSW 220VDC
- G	24 V	22 V	

Part # example SH5.40 - A = 120 VAC Coil

Discount Schedule ST

BREAKER and FUSIBLE COMBINATION TYPE FCXLSK and BCXLSK

Fusible Combination (shown with operators)



Complete Line of Enclosed Controls

- NEMA Type 1 (metal)
- NEMA 3R (metal)
- NEMA 12 (metal)
- NEMA 4X (fiberglass)
- X-Proof (contact factory)

• Combinations include type XLS starter and overload relay complete with precision ambient compensated heaters and differential single phasing protection.

• All combination controls are included with safety door interlock and padlockable operators.

Breaker Combination



AEG

BREAKER and FUSIBLE COMBINATIONS Type FCXLSK and BCXLSK

Conformity to Standards

IEC 947-4-1
VDE 0660
EN 60947
BS 5424
UL508




ELECTRICAL & ELECTRONIC CONTROLS, INC.
3881 DANBURY ROAD
BREWSTER, NY 10509
845-278-5777 FAX 845-278-5444
E-MAIL: info@eecontrols.com

EE CONTROLS, LTD
17 STEWART COURT
ORANGEVILLE, ONTARIO
CANADA L9W 3Z9
519-941-6845 FAX 519-940-0514
E-Mail: infoeecontrols@on.aibn.com

Fusible /Non Fusible Combination Controls

- A. UL/CSA Manual Motor Disconnect with door safety interlocks. Industrial Controls Disconnects are load make, load break, UL Listed for motor load switching duty.
- B. Fuse Blocks are type "J" as standard. For "R" Type, insert at end of part number "R" (same list price), for type cc 30 Amp fuse block - add "cc".
- C. Type XLSK Starter and overload relay complete with precision ambient compensated heaters and differential single phasing protection.

Fusible Disconnect Type Enclosed

Voltage	Design Rating Max HP 	Fuse Block Amps	Catalog No. Type FC XLS-	(Metal) General Purpose NEMA1 -M01	(Non Metal) Dust tight Outdoor NEMA4X -4X	(Metal) Dust Tight Drip Tight NEMA 12/4 -M4	Non Fusible Omit Fuse Block Deduct NFCXLS
200/230	5	30	7K-1 * - * - *	\$ 510	\$ 620	\$ 620	\$ - 26
460	10	30	7K-2 * - * - *	\$ 510	\$ 620	\$ 620	\$ - 26
230	7 1/2	60	11K-1 * - * - *	\$ 545	\$ 690	\$ 690	\$ - 26
460	15	30	11K-2 * - * - *	\$ 545	\$ 690	\$ 690	\$ - 26
200	10	60	15K-1 * - * - *	\$ 700	\$ 790	\$ 790	\$ - 26
230	10	60	15K-2 * - * - *	\$ 700	\$ 790	\$ 790	\$ - 26
460	20	60	15K-3 * - * - *	\$ 700	\$ 790	\$ 790	\$ - 26
200/230	15	100	22K-1 * - * - *	\$ 850	\$ 990	\$ 990	\$ - 26
460	30	60	22K-2 * - * - *	\$ 850	\$ 990	\$ 990	\$ - 26
200/230	20/25	100	37K-1 * - * - *	\$ 1,170	\$ 1,430	\$ 1,430	\$ - 52
460	50	100	37K-2 * - * - *	\$ 1,170	\$ 1,430	\$ 1,430	\$ - 52
200/230	25/30	100	45K-1 * - * - *	\$ 1,390	\$ 1,650	\$ 1,650	\$ - 52
460	60	100	45K-2 * - * - *	\$ 1,390	\$ 1,650	\$ 1,650	\$ - 52
230	40	200	55K-1 * - * - *	\$ 2,150	\$ 2,660	\$ 2,660	\$ - 88
460	75	200	55K-2 * - * - *	\$ 2,150	\$ 2,660	\$ 2,660	\$ - 88
200/230	40/50	200	75K-1 * - * - *	\$ 2,630	\$ 3,280	\$ 3,280	\$ - 88
460	100	200	75K-2 * - * - *	\$ 2,630	\$ 3,280	\$ 3,280	\$ - 88
200/230	60/75	400	110K-1 * - * - *	\$ 4,680	\$ 5,200	\$ 5,200	\$ - 190
460	150	400	110K-2 * - * - *	\$ 4,680	\$ 5,200	\$ 5,200	\$ - 190
200/230	100	400	160K-1 * - * - *	\$ 5,600	\$ 7,050	\$ 7,050	\$ - 190
460	250	400	160K-2 * - * - *	\$ 5,600	\$ 7,050	\$ 7,050	\$ - 190
200/230	125/150	600	220K-1 * - * - *	\$ 9,260	\$ 11,510	\$ 11,510	\$ - 290
460	300	600	220K-2 * - * - *	\$ 9,260	\$ 11,510	\$ 11,510	\$ - 290
230	200	600	280K-1 * - * - *	Check With Factory			
460	400	600	280K-2 * - * - *				
230	250	600	375K-1 * - * - *				
460	500	600	375K-2 * - * - *				



Steps to Order Motor Starter:	
Step 1 - Size Choose from the UL HP and Voltage list per your application. For Example: 5 HP 230V 3 Phase Part# FC XL7K- 1*	
Step 2 - Coil * From the coil suffix chart on next page select the appropriate coil suffix For Example: 120 VAC Coil = A Part # FC XLS7K-1A-	
Step 3 - Overload Amps** This step requires a suffix for your overload protection, refer to "OVERLOAD RELAY SUFFIX TABLE" Next Page. (Example : 5HP @ 230V 3 Phase , if 13 full load Amps= Suffix "N")	
Step 4 - Enclosure specify "open" or "enclosed" requirements. For Example if NEMA 12 Complete Part # FCXLS7K - 1A - N-M4	

- For Factory Installed Additions
See Page#38, 39 Special Features
Include:
Transformers - Primary , secondary
Fusing included
Pilot Lights
HOA ,Start /Stop,on off selector switches,ect.
Time Delay Relays
Phase Loss , Reverse Phase, Voltage Monitors.