

ACCESSORY KIT INSTALLATION MANUAL

HARD START KITS (2SA067*)

FOR USE WITH MODELS: 13+ SEER AIR CONDITIONERS AND HEAT PUMPS

GENERAL INFORMATION

Only qualified persons shall install this equipment and interpret these instructions.

IMPORTANT

These instructions are intended for the use of qualified individuals specially trained and experienced in installation of this type of equipment and related system components. Installation and service personnel are required by some states to be licensed.

⚠ WARNING

Improper installation may damage equipment, can create a shock hazard, and will void the warranty.

NOTICE

The words "Shall" or "Must" indicate a requirement which is essential to satisfactory and safe product performance. The words "Should" or "May" indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

Contents of Kit

The compressor Hard Start Kit consists of a potential (start) relay, screws, capacitor strap and start capacitor with wiring leads. Kit may contain more hardware than necessary for some models and wires may be longer than required. Hard Start Kits for the various models are listed in Table 1, pages 2-6.

IMPORTANT

Do not mis-match kits or damage will occur to the equipment.

APPLICATION

The compressor in the outdoor unit may have difficulty starting under certain abnormal conditions. These abnormal conditions might include low supply voltage, exceptionally high operating temperatures, short thermostat cycling, etc. When such conditions exist and cannot be corrected, a field-installed Hard Start Kit is recommended.

NOTICE

All Hard Start Kits listed in these instructions are for use with outdoor units rated at 208-230V/1PH/60Hz.

⚠ WARNING

SHOCK HAZARD

Shut off electrical supply to outdoor unit at main disconnect. One side of the contactor remains closed at all times, so main disconnect must be opened when servicing electrical components to prevent electrical shock, which could result in personal injury or death.

TABLE 1: Hard Start Kits

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06709706	H1RD018S06	ERC(S,Q)0181BA	HABD-F018S	–	AC018X1321	Bristol (H29B15UABCA)	A
S1-2SA06709706	H1RD024S06	ERC(S,Q)0241BA	HABD-F024S	–	AC024X1321	Bristol (H29B18UABCA)	A
S1-2SA06721706	H1RD030S06	ERC(S,Q)0301BA	HABD-F030S	–	AC030X1321	Bristol (H29B24UABCA)	A
S1-2SA06708306	H1RD036S06	ERC(S,Q)0361BA	HABD-F036S	–	AC036X1321	Bristol (H29B28UABCA)	A
S1-2SA06704006	H1RD042S06	ERC(S,Q)0421CA	HABD-F042S	–	AC042X1321	Copeland (ZR36K3-PFV)	A
S1-2SA06704006	H1RD048S06	ERC(S,Q)0481CA	HABD-F048S	–	AC048X1321	Copeland (ZR42K3-PFV)	A
S1-2SA06707906	H1RD060S06	ERCS0601BA	HABD-F060S	–	AC060X1321	Danfoss (HDM048U1LP6)	A
S1-2SA06702006	H2RD018S06	ERCS0181BB	HBBF-F018S	–	AC018X1322	Bristol (H21J14BABCA)	A
S1-2SA06709706	H2RD024S06	ERC(S,Q)0241BB	HBBF-F024S	–	AC024X1322	Bristol (H29B18UABCA)	A
S1-2SA06705906	H2RD030S06	ERC(S,Q)0301BB	HBBF-F030S	–	AC030X1322	Bristol (H21J25BABCA)	A
S1-2SA06708106	H2RD036S06	ERC(S,Q)0361BB	HBBF-F036S	–	AC036X1322	Bristol (H21J30BABCA)	A
S1-2SA06708106	H2RD042S06	ERC(S,Q)0421BB	HBBF-F042S	–	AC042X1322	Bristol (H20J353ABCA)	A
S1-2SA06708006	H2RD048S06	ERC(S,Q)0481BB	HBBF-F048S	–	AC048X1322	Danfoss (HRM045U1LP6)	A
S1-2SA06707906	H2RD060S06	ERCS0601BB	HBBF-F060S	–	AC060X1322	Danfoss (HRM054U1LP6)	A
S1-2SA06708406	H1ZD018S06	CCBD018FS1	LCBD018FS1	–	–	Bristol (H89B133ABCA)	A
S1-2SA06709106	H1ZD024S06	CCBD024FS1	LCBD024FS1	–	–	Bristol (H89B183ABCA)	A
S1-2SA06721706	H1ZD030S06	CCBD030FS1	LCBD030FS1	–	–	Bristol (H81J22BABCA)	A
S1-2SA06709006	H1ZD036S06	CCBD036FS1	LCBD036FS1	–	–	Bristol (H89B283ABCA)	A
S1-2SA06704006	H1ZD042S06	CCBD042FS1	LCBD042FS1	–	–	Copeland (ZP34K5E-PFV)	A
S1-2SA06708006	H1ZD048S06	CCBD048FS1	LCBD048FS1	–	–	Danfoss (HRH038U1LP6)	A
S1-2SA06707906	H1ZD060S06	CCBD060FS1	LCBD060FS1	–	–	Danfoss (HRH049U1LP6)	A
S1-2SA06702006	H1RE018S06	FRCS0181BA	HABE-F018S	–	–	Bristol (H21J14BABCA)	A
S1-2SA06709206	H3RE024S06	FRCS0241BF	HCBE-F024S	–	–	Bristol (H21J20BABCA)	A
S1-2SA06721706	H4RE024S06	FRCS0241BH	HDBE-F024S	–	–	Bristol (H21J17BABCA)	A
S1-2SA06705906	H3RE030S06	FRCS0301BF	HCBE-F030S	–	–	Bristol (H21J24BABCA)	A
S1-2SA06704006	H1RE036S06	FRCS0361CD	HABE-F036S	–	–	Copeland (ZR30K3-PFV)	A
S1-2SA06704006	H2RE042S06	FRCS0421CE	HBBE-F042S	–	–	Copeland (ZR36K3-PFV)	A
S1-2SA06704006	H2RE048S06	FRCS0481CE	HBBE-F048S	–	–	Copeland (ZR42K3-PFV)	A
S1-2SA06707906	H2RE060S06	FRCS0601BF	HBBE-F060S	–	–	Danfoss (HDM048U1LP6)	A
S1-2SA06707906	H3RE060S06	FRCS0601BG	HCBE-F060S	–	–	Danfoss (HRM051U1LP6)	A
S1-2SA06709606	E1RD018S06	ERHS0181BA	EABD-F018S	–	HP018X1321	Bristol (H20J153ABCA)	B
S1-2SA06709606	E1RD024S06	ERH(S,Q)0241BA	EABD-F024S	–	HP024X1321	Bristol (H20J193ABCA)	B
S1-2SA06709206	E1RD030S06	ERH(S,Q)0301BA	EABD-F030S	–	HP030X1321	Bristol (H20J253ABCA)	B
S1-2SA06708106	E1RD036S06	ERH(S,Q)0361BA	EABD-F036S	–	HP036X1321	Bristol (H21J30BABCA)	B
S1-2SA06708106	E1RD042S06	ERH(S,Q)0421BA	EABD-F042S	–	HP042X1321	Bristol (H21J36BABCA)	B
S1-2SA06708006	E1RD048S06	ERHS0481BA	EABD-F048S	–	HP048X1321	Danfoss (HRM042U1LP6)	B
S1-2SA06707906	E1RD060S06	ERHS0601BA	EABD-F060S	–	HP060X1321	Danfoss (HRM054U1LP6)	B
S1-2SA06708406	E1ZD018S06	CPBD018FS1	LPBD018FS1	–	–	Bristol (H89B133ABCA)	B
S1-2SA06709106	E1ZD024S06	CPBD024FS1	LPBD024FS1	–	–	Bristol (H89B183ABCA)	B
S1-2SA06709106	E1ZD030S06	CPBD030FS1	LPBD030FS1	–	–	Bristol (H89B223ABCA)	B
S1-2SA06709006	E1ZD036S06	CPBD036FS1	LPBD036FS1	–	–	Bristol (H89B283ABCA)	B
S1-2SA06708006	E1ZD042S06	CPBD042FS1	LPBD042FS1	–	–	Danfoss (HRH036U1LP6)	B
S1-2SA06707906	E1ZD048S06	CPBD048FS1	LPBD048FS1	–	–	Danfoss (HRH041U1LP6)	B
S1-2SA06707906	E1ZD060S06	CPBD060FS1	LPBD060FS1	–	–	Danfoss (HRH049U1LP6)	B
S1-2SA06702006	CMB01811	AC3A018F1	AL3A018F1	–	–	Bristol (H21J15BABCA)	C
S1-2SA06709206	CMB02411	AC3A024F1	AL3A024F1	–	–	Bristol (H21J20BABCA)	C
S1-2SA06705906	CMB03011	AC3A030F1	AL3A030F1	–	–	Bristol (H21J25BABCA)	C
S1-2SA06708106	CMB03611	AC3A036F1	AL3A036F1	–	–	Bristol (H21J30BABCA)	C

For note see Page 7.

TABLE 1: Hard Start Kits (Continued)

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06708006	CMB04211	AC3A042F1	AL3A042F1	-	-	Danfoss (HRM038U1LP6)	C
S1-2SA06708006	CMB04811	AC3A048F1	AL3A048F1	-	-	Danfoss (HRM045U1LP6)	C
S1-2SA06707906	CMB06011	AC3A060F1	AL3A060F1	-	-	Danfoss (HRM054U1LP6)	C
S1-2SA06708206	CZB01811	AC3B018F1	AL3B018F1	-	-	Copeland (ZP16K3E-PFV)	C
S1-2SA06704006	CZB02411	AC3B024F1	AL3B024F1	-	-	Copeland (ZP20K3E-PFV)	C
S1-2SA06704006	CZB03011	AC3B030F1	AL3B030F1	-	-	Copeland (ZP26K3E-PFV)	C
S1-2SA06708006	CZB03611	AC3B036F1	AL3B036F1	-	-	Danfoss (HRH032U1LP6)	C
S1-2SA06708006	CZB04211	AC3B042F1	AL3B042F1	-	-	Danfoss (HRH036U1LP6)	C
S1-2SA06707906	CZB04811	AC3B048F1	AL3B048F1	-	-	Danfoss (HRH041U1LP6)	C
S1-2SA06707906	CZB06011	AC3B060F1	AL3B060F1	-	-	Danfoss (HRH051U1LP6)	C
S1-2SA06708006	CZE02411	AC5B024F1	AL5B024F1	-	-	Copeland (ZPS20K4E-PFV)	C
S1-2SA06709906	CZE03611	AC5B036F1	AL5B036F1	-	-	Copeland (ZPS30K4E-PFV)	C
S1-2SA06709906	CZE03811	-	-	-	-	Copeland (ZPS30K4E-PFV)	C
S1-2SA06704006	CZE04811	AC5B048F1	AL5B048F1	-	-	Copeland (ZPS40K4E-PFV)	C
S1-2SA06709406	CZE06011	AC5B060F1	AL5B060F1	-	-	Copeland (ZPS51K4E-PFV)	C
S1-2SA06704006	CZF02413	AC6B024F3	AL6B024F3	-	-	Copeland (ZP20K5E-PFV)	C
S1-2SA06704006	CZF03013	AC6B030F3	AL6B030F3	-	-	Copeland (ZP25K5E-PFV)	C
S1-2SA06709306	CZF03613	AC6B036F3	AL6B036F3	-	-	Danfoss (HRH029U1LP6)	C
S1-2SA06704006	CZF03614	AC6B036F4	AL6B036F4	-	-	Copeland (ZP29K5E-PFV)	C
S1-2SA06704006	CZF04213	AC6B042F3	AL6B042F3	-	-	Copeland (ZP34K5E-PFV)	C
S1-2SA06708006	CZF04813	AC6B048F3	AL6B048F3	-	-	Danfoss (HRH038U1LP6)	C
S1-2SA06704006	CZF04814	AC6B048F4	AL6B048F4	-	-	Copeland (ZP39K5E-PFV)	C
S1-2SA06709506	CZF06013	AC6B060F3	AL6B060F3	-	-	Copeland (ZP44K5E-PFV)	C
S1-2SA06708006	CZH02411	AC8B024F1	AL8B024F1	-	-	Copeland (ZPS20K4E-PFV)	C
S1-2SA06709906	CZH03611	AC8B036F1	AL8B036F1	-	-	Copeland (ZPS30K4E-PFV)	C
S1-2SA06704006	CZH04811	AC8B048F1	AL8B048F1	-	-	Copeland (ZPS40K4E-PFV)	C
S1-2SA06709406	CZH06011	AC8B060F1	AL8B060F1	-	-	Copeland (ZPS51K4E-PFV)	C
S1-2SA06704006	YMB01811	HC3A018F1	HL3A018F1	-	-	Copeland (ZR16K4-PFV)	D
S1-2SA06704006	YMB02411	HC3A024F1	HL3A024F1	-	-	Copeland (ZR22K4-PFV)	D
S1-2SA06704006	YMB03011	HC3A030F1	HL3A030F1	-	-	Copeland (ZR26K3-PFV)	D
S1-2SA06708106	YMB03611	HC3A036F1	HL3A036F1	-	-	Bristol (H21J30BABCA)	D
S1-2SA06708006	YMB04211	HC3A042F1	HL3A042F1	-	-	Danfoss (HRM040U1LP6)	D
S1-2SA06708006	YMB04811	HC3A048F1	HL3A048F1	-	-	Danfoss (HRM045U1LP6)	D
S1-2SA06707906	YMB06011	HC3A060F1	HL3A060F1	-	-	Danfoss (HRM054U1LP6)	D
S1-2SA06708206	YZB01811	HC3B018F1	HL3B018F1	-	-	Copeland (ZP16K3E-PFV)	D
S1-2SA06704006	YZB02411	HC3B024F1	HL3B024F1	-	-	Copeland (ZP20K3E-PFV)	D
S1-2SA06704006	YZB03011	HC3B030F1	HL3B030F1	-	-	Copeland (ZP26K3E-PFV)	D
S1-2SA06708006	YZB03611	HC3B036F1	HL3B036F1	-	-	Danfoss (HRH032U1LP6)	D
S1-2SA06708006	YZB04211	HC3B042F1	HL3B042F1	-	-	Danfoss (HRH036U1LP6)	D
S1-2SA06707906	YZB04811	HC3B048F1	HL3B048F1	-	-	Danfoss (HRH041U1LP6)	D
S1-2SA06707906	YZB06011	HC3B060F1	HL3B060F1	-	-	Danfoss (HRH051U1LP6)	D
S1-2SA06707906	YZB06012	HC3B060F2	HL3B060F2	-	-	Danfoss (HRH049U1LP6)	D
S1-2SA06708006	YZE02411	HC5B024F1	HL5B024F1	-	-	Copeland (ZPS20K4E-PFV)	D
S1-2SA06709906	YZE03611	HC5B036F1	HL5B036F1	-	-	Copeland (ZPS30K4E-PFV)	D
S1-2SA06709906	YZE03811	-	-	-	-	Copeland (ZPS30K4E-PFV)	D
S1-2SA06704006	YZE04811	HC5B048F1	HL5B048F1	-	-	Copeland (ZPS40K4E-PFV)	D
S1-2SA06709406	YZE06011	HC5B060F1	HL5B060F1	-	-	Copeland (ZPS51K4E-PFV)	D
S1-2SA06704006	YZF02413	HC6B024F3	HL6B024F3	-	-	Copeland (ZP20K5E-PFV)	D

For note see Page 7.

TABLE 1: Hard Start Kits (Continued)

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06704006	YZF03013	HC6B030F3	HL6B030F3	-	-	Copeland (ZP24K5E-PFV)	D
S1-2SA06704006	YZF03613	HC6B036F3	HL6B036F3	-	-	Copeland (ZP29K5E-PFV)	D
S1-2SA06708006	YZF04213	HC6B042F3	HL6B042F3	-	-	Danfoss (HRH034U1LP6)	D
S1-2SA06708006	YZF04813	HC6B048F3	HL6B048F3	-	-	Danfoss (HRH040U1LP6)	D
S1-2SA06709406	YZF06013	HC6B060F3	HL6B060F3	-	-	Copeland (ZPS51K4E-PFV)	D
S1-2SA06708006	YZH02411	HC8B024F1	HL8B024F1	-	-	Copeland (ZPS20K4E-PFV)	D
S1-2SA06709906	YZH03611	HC8B036F1	HL8B036F1	-	-	Copeland (ZPS30K4E-PFV)	D
S1-2SA06704006	YZH04811	HC8B048F1	HL8B048F1	-	-	Copeland (ZPS40K4E-PFV)	D
S1-2SA06709406	YZH06011	HC8B060F1	HL8B060F1	-	-	Copeland (ZPS51K4E-PFV)	D
S1-2SA06708506	AY012MA321	-	-	-	AM012MA321	Panasonic (2K20S236T6A)	E
S1-2SA06708606	AY018MA321	-	-	-	AM018MA321	Panasonic (2K22S236SUB)	E
S1-2SA06709806	AY024MA321	-	-	-	AM024MA321	Panasonic (2J29S236A1A)	E
-	AY030MA321	-	-	-	AM030MA321	Panasonic (2J35S236B1A)	E
S1-2SA06708106	AY036MA321	-	-	-	AM036MA321	Bristol (H21J30BABCA)	E
S1-2SA06708506	AY012MA322	-	-	-	AM012MA322	Panasonic (2K20S236T6A)	E
S1-2SA06708606	AY018MA32(2,3)	-	-	-	AM018MA322	Panasonic (2K22S236SUB)	E
S1-2SA06709206	AY024MA32(2,3)	-	-	-	AM024MA322	Bristol (H21J20BABCA)	E
S1-2SA06705906	AY030MA32(2,3)	-	-	-	AM030MA322	Bristol (H21J24BABCA)	E
S1-2SA06708606	YCJD18S21S2	CCJD18S21S2	LCJD18S21S2	-	-	Panasonic (2K22S236SUB)	F
S1-2SA06708706	YCJD24S21S2	CCJD24S21S2	LCJD24S21S2	-	-	Panasonic (2J29S236B1A)	F
S1-2SA06705906	YCJD30S21S2	CCJD30S21S2	LCJD30S21S2	-	-	Bristol (H21J24BABCA)	F
S1-2SA06708106	YCJD36S21S2	CCJD36S21S2	LCJD36S21S2	-	-	Bristol (H21J30BABCA)	F
S1-2SA06708106	YCJD42S21S2	CCJD42S21S2	LCJD42S21S2	-	-	Bristol (H21J36BABCA)	F
S1-2SA06708106	YCJD48S21S2	CCJD48S21S2	LCJD48S21S2	-	-	Bristol (H21J38BABCA)	F
S1-2SA06707906	YCJD60S21S2	CCJD60S21S2	LCJD60S21S2	-	-	Danfoss (HRM051U1LP6)	F
S1-2SA06708606	-	-	-	TCGD12S21S(1,2)	GCGD12S21S(1,2)	Panasonic (2K15S236UUA)	F
S1-2SA06708606	-	-	-	TCGD18S21S(1,2)	GCGD18S21S(1,2)	Panasonic (2K22S236SUB)	F
S1-2SA06702006	-	-	-	TCGD18S21S2X	GCGD18S21S2X	Bristol (H21J14BABCA)	F
S1-2SA06708706	-	CCGD24S21Q(1,2)	-	TCGD24S21S(1,2)	GCGD24S21S(1,2)	Panasonic (2J29S236B1A)	F
S1-2SA06721706	-	-	-	TCGD24S21S2X	GCGD24S21S2X	Bristol (H21J19BABCA)	F
S1-2SA06705906	-	CCGD30S21Q(1,2)	-	TCGD30S21S(1,2)	GCGD30S21S(1,2)	Bristol (H21J24BABCA)	F
S1-2SA06708106	-	CCGD36S21Q(1,2)	-	TCGD36S21S(1,2)	GCGD36S21S(1,2)	Bristol (H21J30BABCA)	F
S1-2SA06708106	-	CCGD42S21Q(1,2)	-	TCGD42S21S(1,2)	GCGD42S21S(1,2)	Bristol (H21J36BABCA)	F
S1-2SA06708106	-	CCGD48S21Q(1,2)	-	TCGD48S21S(1,2)	GCGD48S21S(1,2)	Bristol (H21J38BABCA)	F
S1-2SA06707906	-	CCGD60S21Q(1,2)	-	TCGD60S21S(1,2)	GCGD60S21S(1,2)	Danfoss (HRM051U1LP6)	F
S1-2SA06704006	-	-	-	-	GCGD60S21S2X	Copeland (ZR54K5-PFV)	F
S1-2SA06708606	YCJD18S41S1	CCJD18S41S1	LCJD18S41S1	TCJD18S41S3	RAC13J184S21	Panasonic (5KS150FAB21)	F
S1-2SA06721706	YCJD24S41S1	CCJD24S41S1	LCJD24S41S1	TCJD24S41S3	RAC13J244S21	Bristol (H82J193ABCA)	F
S1-2SA06709206	YCJD30S41S1	CCJD30S41S1	LCJD30S41S1	TCJD30S41S3	RAC13J304S21	Bristol (H82J223ABCA)	F
S1-2SA06708906	YCJD36S41S1	CCJD36S41S1	LCJD36S41S1	TCJD36S41S3	RAC13J364S21	Bristol (H82J273ABCA)	F
S1-2SA06708106	YCJD42S41S1	CCJD42S41S1	LCJD42S41S1	TCJD42S41S3	RAC13J424S21	Bristol (H82J353ABCA)	F
S1-2SA06708106	YCJD42S41S1	CCJD42S41S1	LCJD42S41S1	TCJD42S41S4	RAC13J424S21	Bristol (H82J353ABCA)	F
S1-2SA06708106	YCJD48S41S1	CCJD48S41S1	LCJD48S41S1	TCJD48S41S3	RAC13J484S21	Bristol (H82J373ABCA)	F
S1-2SA06707906	YCJD60S41S1	CCJD60S41S1	LCJD60S41S1	TCJD60S41S3	-	Danfoss (HRH051U1LP6)	F
S1-2SA06704006	YCJD60S41S2	-	-	TCJD60S41S4	RAC13J604S21	Copeland (ZP51K5E-PFV)	F
S1-2SA06708606	-	-	-	TCGD18S41S(1,3)	GCGD18S41S(1,3)	Panasonic (5KS150FAB21)	F
S1-2SA06721706	-	CCGD24S41Q3	-	TCGD24S41S(1,3)	GCGD24S41S(1,3)	Bristol (H82J193ABCA)	F
S1-2SA06709206	-	CCGD30S41Q3	-	TCGD30S41S(1,3)	GCGD30S41S(1,3)	Bristol (H82J223ABCA)	F

For note see Page 7.

TABLE 1: Hard Start Kits (Continued)

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06708906	–	CCGD36S41Q3	–	TCGD36S41S(1,3)	GCGD36S41S(1,3)	Bristol (H82J273ABCA)	F
S1-2SA06708106	–	CCGD42S41Q3	–	TCGD42S41S(1,3)	GCGD42S41S(1,3)	Bristol (H82J353ABCA)	F
S1-2SA06708106	–	CCGD48S41Q3	–	TCGD48S41S(1,3)	GCGD48S41S(1,3)	Bristol (H82J373ABCA)	F
S1-2SA06707906	–	CCGD60S41Q3	–	TCGD60S41S(1,3)	GCGD60S41S(1,3)	Danfoss (HRH051U1LP6)	F
S1-2SA06704006	–	CCGD60S41Q5	–	TCGD60S41S4	GCGD60S41S4	Copeland (ZP51K5E-PFV)	F
S1-2SA06704006	YCJF18S41S1	–	–	TCJF18S41S3	RAC14J184S21	Copeland (ZP14K5E-PFV)	F
S1-2SA06704006	YCJF24S41S1	CCJF24S41S1	LCJF24S41S1	TCJF24S41S3	RAC14J244S21	Copeland (ZP21K5E-PFV)	F
S1-2SA06704006	YCJF30S41S1	CCJF30S41S1	LCJF30S41S1	TCJF30S41S3	RAC14J304S21	Copeland (ZP25K5E-PFV)	F
S1-2SA06704006	YCJF36S41S1	CCJF36S41S1	LCJF36S41S1	TCJF36S41S3	RAC14J364S21	Copeland (ZP29K5E-PFV)	F
S1-2SA06704006	YCJF42S41S1	CCJF42S41S1	LCJF42S41S1	TCJF42S41S3	RAC14J424S21	Copeland (ZP34K5E-PFV)	F
S1-2SA06708006	YCJF48S41S1	CCJF48S41S1	LCJF48S41S1	TCJF48S41S3	–	Danfoss (HRH038U1LP6)	F
S1-2SA06704006	YCJF48S41S2	–	–	TCJF48S41S4	RAC14J484S21	Copeland (ZP39K5E-PFV)	F
S1-2SA06707906	YCJF60S41S1	CCJF60S41S1	LCJF60S41S1	TCJF60S41S3	–	Danfoss (HRH047U1LP6)	F
S1-2SA06704006	YCJF60S41S2	–	–	TCJF60S41S4	RAC14J604S21	Copeland (ZP49K5E-PFV)	F
S1-2SA06704006	–	–	–	TCGF18S41S3	–	Copeland (ZP14K5E-PFV)	F
S1-2SA06704006	–	–	–	TCGF24S41S(1,3)	–	Copeland (ZP21K5E-PFV)	F
S1-2SA06704006	–	–	–	TCGF30S41S(1,3)	–	Copeland (ZP25K5E-PFV)	F
S1-2SA06704006	–	–	–	TCGF36S41S(1,3)	–	Copeland (ZP29K5E-PFV)	F
S1-2SA06704006	–	–	–	TCGF42S41S(1,3)	–	Copeland (ZP34K5E-PFV)	F
S1-2SA06708006	–	–	–	TCGF48S41S(1,3)	–	Danfoss (HRH038U1LP6)	F
S1-2SA06704006	–	–	–	TCGF48S41S4	–	Copeland (ZP39K5E-PFV)	F
S1-2SA06707906	–	–	–	TCGF60S41S(1,3)	–	Danfoss (HRH047U1LP6)	F
S1-2SA06704006	–	–	–	TCGF60S41S4	–	Copeland (ZP49K5E-PFV)	F
S1-2SA06702006	–	–	–	THGD18S21S1	GHGD18S21S1	Bristol (H21J15BABCA)	G
S1-2SA06721706	–	–	–	THGD24S21S1	GHGD24S21S1	Bristol (H21J19BABCA)	G
S1-2SA06705906	–	–	–	THGD30S21S1	GHGD30S21S1	Bristol (H21J24BABCA)	G
S1-2SA06708106	–	–	–	THGD36S21S1	GHGD36S21S1	Bristol (H21J30BABCA)	G
S1-2SA06708106	–	–	–	THGD42S21S1	GHGD42S21S1	Bristol (H21J36BABCA)	G
S1-2SA06708006	–	–	–	THGD48S21S1	GHGD48S21S1	Danfoss (HRM045U1LP6)	G
S1-2SA06707906	–	–	–	THGD60S21S1	GHGD60S21S1	Danfoss (HRM054U1LP6)	G
S1-2SA06708406	YHJD18S41S1	CHJD18S41S1	LHJD18S41S1	–	–	Bristol (H89B133ABCA)	G
S1-2SA06704006	YHJD18S41S2	CHJD18S41S2	LHJD18S41S2	THJD18S41S3	RHP13J184S21	Copeland (ZP16K5E-PFV)	G
S1-2SA06709106	YHJD24S41S1	CHJD24S41S1	LHJD24S41S1	–	–	Bristol (H89B183ABCA)	G
S1-2SA06721706	YHJD24S41S(2,4)	CHJD24S41S2	LHJD24S41S2	THJD24S41S(3,4)	RHP13J244S21	Bristol (H82J183ABCA)	G
S1-2SA06709106	YHJD30S41S1	CHJD30S41S1	LHJD30S41S1	–	–	Bristol (H89B223ABCA)	G
S1-2SA06709206	YHJD30S41S(2,4)	CHJD30S41S2	LHJD30S41S2	THJD30S41S(3,4)	RHP13J304S21	Bristol (H82J223ABCA)	G
S1-2SA06709006	YHJD36S41S1	CHJD36S41S1	LHJD36S41S1	–	–	Bristol (H89B283ABCA)	G
S1-2SA06708906	YHJD36S41S(2,4)	CHJD36S41S(2,4)	LHJD36S41S2	THJD36S41S(3,4)	RHP13J364S21	Bristol (H82J283ABCA)	G
S1-2SA06708006	YHJD42S41S1	CHJD42S41S1	LHJD42S41S1	THJD42S41S3	–	Danfoss (HRH036U1LP6)	G
S1-2SA06708106	YHJD42S41S4	–	–	THJD42S41S4	RHP13J424S21	Bristol (H82J323ABCA)	G
S1-2SA06707906	YHJD48S41S1	CHJD48S41S1	LHJD48S41S1	THJD48S41S3	–	Danfoss (HRH041U1LP6)	G
S1-2SA06708106	YHJD48S41S4	–	–	THJD48S41S4	RHP13J484S21	Bristol (H82B363ABCA)	G
S1-2SA06707906	YHJD60S41S(1,2)	CHJD60S41S(1,2)	LHJD60S41S(1,2)	THJD60S41S3	–	Danfoss (HRH049U1LP6)	G
S1-2SA06707906	YHJD60S41S4	–	–	THJD60S41S4	–	Danfoss (HRH048U1LP6)	G
S1-2SA06704006	YHJD60S41S5	–	–	THJD60S41S5	RHP13J604S21	Copeland (ZP51K5E-PFV)	G
S1-2SA06708406	–	–	–	THGD18S41S1	GHGD18S41S1	Bristol (H89B133ABCA)	G
S1-2SA06704006	–	–	–	THGD18S41S(2,3)	GHGD18S41S(2,3)	Copeland (ZP16K5E-PFV)	G
S1-2SA06709106	–	–	–	THGD24S41S1	GHGD24S41S1	Bristol (H89B183ABCA)	G

For note see Page 7.

TABLE 1: Hard Start Kits (Continued)

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06721706	–	CHGD24S41Q1	–	THGD24S41S(2,3,4)	GHGD24S41S(2,3,4)	Bristol (H82J183ABCA)	G
S1-2SA06709106	–	–	–	THGD30S41S1	GHGD30S41S1	Bristol (H89B223ABCA)	G
S1-2SA06709206	–	CHGD30S41Q1	–	THGD30S41S(2,3,4)	GHGD30S41S(2,3,4)	Bristol (H82J223ABCA)	G
S1-2SA06709006	–	–	–	THGD36S41S1	GHGD36S41S1	Bristol (H89B283ABCA)	G
S1-2SA06708906	–	CHGD36S41Q1	–	THGD36S41S(2,3,4)	GHGD36S41S(2,3,4)	Bristol (H82J283ABCA)	G
S1-2SA06708006	–	CHGD42S41Q1	–	THGD42S41S(1,3)	GHGD42S41S(1,3)	Danfoss (HRH036U1LP6)	G
S1-2SA06708106	–	–	–	THGD42S41S4	GHGD42S41S4	Bristol (H82J323ABCA)	G
S1-2SA06707906	–	–	–	THGD48S41S(1,3)	GHGD48S41S(1,3)	Danfoss (HRH041U1LP6)	G
S1-2SA06708106	–	–	–	THGD48S41S4	GHGD48S41S4	Bristol (H82B363ABCA)	G
S1-2SA06707906	–	–	–	THGD60S41S(1,2,3)	GHGD60S41S(2,3)	Danfoss (HRH049U1LP6)	G
S1-2SA06707906	–	–	–	THGD60S41S4	GHGD60S41S4	Danfoss (HRH048U1LP6)	G
S1-2SA06721706	YHJR18S41S3	–	–	THJR18S41S3	RHP13R184S21	Bristol (H82J153ABCA)	G
S1-2SA06721706	YHJR24S41S(3,4)	–	–	THJR24S41S(3,4)	RHP13R244S21	Bristol (H82J193ABCA)	G
S1-2SA06709206	YHJR30S41S(3,4)	–	–	THJR30S41S(3,4)	RHP13R304S21	Bristol (H82J243ABCA)	G
S1-2SA06708906	YHJR36S41S(3,4)	–	–	THJR36S41S(3,4)	RHP13R364S21	Bristol (H82J283ABCA)	G
S1-2SA06708106	YHJR42S41S(3,4)	–	–	THJR42S41S(3,4)	RHP13R424S21	Bristol (H82J323ABCA)	G
S1-2SA06708106	YHJR48S41S(3,4)	–	–	THJR48S41S(3,4)	RHP13R484S21	Bristol (H82J37BABCA)	G
S1-2SA06707906	YHJR60S41S(3,4)	–	–	THJR60S41S(3,4)	–	Danfoss (HRH049U1LP6)	G
S1-2SA06704006	YHJR60S41S5	–	–	THJR60S41S5	RHP13R604S21	Copeland (ZP51K5E-PFV)	G
S1-2SA06721706	–	–	–	THRD18S41S1	GHRD18S41S1	Bristol (H82J153ABCA)	G
S1-2SA06721706	–	–	–	THRD24S41S1	GHRD24S41S1	Bristol (H82J193ABCA)	G
S1-2SA06709206	–	–	–	THRD30S41S1	GHRD30S41S1	Bristol (H82J243ABCA)	G
S1-2SA06708906	–	–	–	THRD36S41S1	GHRD36S41S1	Bristol (H82J283ABCA)	G
S1-2SA06708106	–	–	–	THRD42S41S1	GHRD42S41S1	Bristol (H82J323ABCA)	G
S1-2SA06708106	–	–	–	THRD48S41S1	GHRD48S41S1	Bristol (H82J37BABCA)	G
S1-2SA06707906	–	–	–	THRD60S41S1	GHRD60S41S1	Danfoss (HRH049U1LP6)	G
S1-2SA06704006	YHJF18S41S1	CHJF18S41S1	LHJF18S41S1	THJF18S41S3	RHP14J184S21	Copeland (ZP16K5E-PFV)	G
S1-2SA06704006	YHJF24S41S1	CHJF24S41S1	LHJF24S41S1	THJF24S41S3	RHP14J244S21	Copeland (ZP20K5E-PFV)	G
S1-2SA06704006	YHJF30S41S1	CHJF30S41S1	LHJF30S41S1	THJF30S41S3	RHP14J304S21	Copeland (ZP24K5E-PFV)	G
S1-2SA06709306	YHJF36S41S1	CHJF36S41S1	LHJF36S41S1	THJF36S41S3	–	Danfoss (HRH031U1LP6)	G
S1-2SA06708906	YHJF36S41S4	–	–	THJF36S41S4	RHP14J364S21	Bristol (H82J283ABCA)	G
S1-2SA06708006	YHJF42S41S(1,2)	CHJF42S41S(1,2)	LHJF42S41S(1,2)	THJF42S41S3	–	Danfoss (HRH034U1LP6)	G
S1-2SA06704006	YHJF42S41S5	–	–	THJF42S41S5	RHP14J424S21	Copeland (ZP34K5E-PFV)	G
S1-2SA06708006	YHJF48S41S1	CHJF48S41S1	LHJF48S41S1	THJF48S41S3	–	Danfoss (HRH040U1LP6)	G
S1-2SA06704006	YHJF48S41S5	–	–	THJF48S41S5	RHP14J484S21	Copeland (ZP42K5E-PFV)	G
S1-2SA06709406	YHJF60S41S1	CHJF60S41S1	LHJF60S41S1	THJF60S41S3	RHP14J604S21	Copeland (ZPS51K4E-PFV)	G
S1-2SA06704006	–	–	–	THGF18S41S(1,3)	–	Copeland (ZP16K5E-PFV)	G
S1-2SA06704006	–	–	–	THGF24S41S(1,3)	–	Copeland (ZP20K5E-PFV)	G
S1-2SA06704006	–	–	–	THGF30S41S(1,3)	–	Copeland (ZP24K5E-PFV)	G
S1-2SA06709306	–	–	–	THGF36S41S(1,3)	–	Danfoss (HRH031U1LP6)	G
S1-2SA06708006	–	–	–	THGF42S41S(1,2,3)	–	Danfoss (HRH034U1LP6)	G
S1-2SA06708006	–	–	–	THGF48S41S(1,3)	–	Danfoss (HRH040U1LP6)	G
S1-2SA06709406	–	–	–	THGF60S41S(1,3)	–	Copeland (ZPS51K4E-PFV)	G
S1-2SA06704006	YCHD18S41S1	–	–	TCHD18S41S3	–	Copeland (ZP16K5E-PFV)	H
S1-2SA06704006	YCHD24S41S1	–	–	TCHD24S41S3	–	Copeland (ZP20K5E-PFV)	H
S1-2SA06704006	YCHD30S41S1	–	–	TCHD30S41S3	–	Copeland (ZP24K5E-PFV)	H
S1-2SA06709306	YCHD36S41S1	–	–	TCHD36S41S3	–	Danfoss (HRH029U1LP6)	H
S1-2SA06708006	YCHD48S41S1	–	–	TCHD48S41S3	–	Danfoss (HRH040U1LP6)	H

For note see Page 7.

TABLE 1: Hard Start Kits (Continued)

Hard Start Kit Model Number	Outdoor Unit Model Number					Compressor Model Number	See Section
	York	Coleman	Luxaire	Tag-In-Bag	Generic / OTC		
S1-2SA06704006	YCHD60S41S1	–	–	TCHD60S41S3	–	Copeland (ZP54K5E-PFV)	H
S1-2SA06706706	YCE18B21*	–	–	TC4B1821*	RAC14L18B21*	Bristol (H84B133ABCA)	J
S1-2SA06706706	YCE24B21*	QC4B24B21*	–	TC4B2421*	RAC14L24B21*	Bristol (H84B183ABCA)	J
S1-2SA06706906	YCE30B21*	QC4B30B21*	–	TC4B3021*	RAC14L30B21*	Bristol (H84B233ABCA)	J
S1-2SA06707006	YCE36B21*	QC4B36B21*	–	TC4B3621*	RAC14L36B21*	Bristol (H84B273ABCA)	J
S1-2SA06710206	YCE42B21*	QC4B42B21*	–	TC4B4221*	RAC14L42B21*	Bristol (H84J303ABCA)	J
S1-2SA06710106	YCE48B21*	QC4B48B21*	–	TC4B4821*	RAC14L48B21*	Copeland (ZP42K6E-PFV)	J
S1-2SA06710106	YCE60B21*	QC4B60B21*	–	TC4B6021*	RAC14L60B21*	Copeland (ZP51K6E-PFV)	J
S1-2SA06710106	YCS18B21*	–	–	TW4B1821*	RAW14L18B21*	Copeland (ZP16K6E-PFV)	J
S1-2SA06710106	YCS24B21*	QW4B24B21*	–	TW4B2421*	RAW14L24B21*	Copeland (ZP21K6E-PFV)	J
S1-2SA06710106	YCS30B21*	QW4B30B21*	–	TW4B3021*	RAW14L30B21*	Copeland (ZP25K6E-PFV)	J
S1-2SA06710106	YCS36B21*	QW4B36B21*	–	TW4B3621*	RAW14L36B21*	Copeland (ZP31K6E-PFV)	J
S1-2SA06710106	YCS42B21*	QW4B42B21*	–	TW4B4221*	RAW14L42B21*	Copeland (ZP34K6E-PFV)	J
S1-2SA06710106	YCS48B21*	QW4B48B21*	–	TW4B4821*	RAW14L48B21*	Copeland (ZP42K6E-PFV)	J
S1-2SA06710106	YCS60B21*	QW4B60B21*	–	TW4B6021*	RAW14L60B21*	Copeland (ZP51K6E-PFV)	J
S1-2SA06721806	YFE18B21*	–	–	TF4B1821*		Copeland (ZP14K6E-PFV)	J
S1-2SA06710106	YFE24B21*	–	–	TF4B2421*		Copeland (ZP21K6E-PFV)	J
S1-2SA06710106	YFE30B21*	–	–	TF4B3021*		Copeland (ZP25K6E-PFV)	J
S1-2SA06710106	YFE36B21*	–	–	TF4B3621*		Copeland (ZP31K6E-PFV)	J
S1-2SA06710106	YFE42B21*	–	–	TF4B4221*		Copeland (ZP34K6E-PFV)	J
S1-2SA06710106	YFE48B21*	–	–	TF4B4821*		Copeland (ZP42K6E-PFV)	J
S1-2SA06710106	YFE60B21*	–	–	TF4B6021*		Copeland (ZP51K6E-PFV)	J
S1-2SA06721906	YCD18B21*	–	–	TC3B1821*	RAC13L18B21*	Bristol (H84B123ABCA)	J
S1-2SA06721906	YCD24B21*	QC3B24B21*	–	TC3B2421*	RAC13L24B21*	Bristol (H84B193ABCA)	J
S1-2SA06706906	YCD30B21*	QC3B30B21*	–	TC3B3021*	RAC13L30B21*	Bristol (H84B233ABCA)	J
S1-2SA06707006	YCD36B21*	QC3B36B21*	–	TC3B3621*	RAC13L36B21*	Bristol (H84B283ABCA)	J
S1-2SA06710206	YCD42B21*	QC3B42B21*	–	TC3B4221*	RAC13L42B21*	Bristol (H84J333ABCA)	J
S1-2SA06710106	YCD48B21*	QC3B48B21*	–	TC3B4821*	RAC13L48B21*	Copeland (ZP42K6E-PFV)	J
S1-2SA06710106	YCD60B21*	QC3B60B21*	–	TC3B6021*	RAC13L60B21*	Copeland (ZP51K6E-PFV)	J

* Suffix may have an S or H and additional suffixes.

SECTION A

AC0**X13, ERCQ, ERCS, FRCS, H*BD, H*BE, H*RD & H*RE SERIES SPLIT AIR CONDITIONERS.

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the two pilot holes on the left angled side to attach start relay. See Figure 1.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

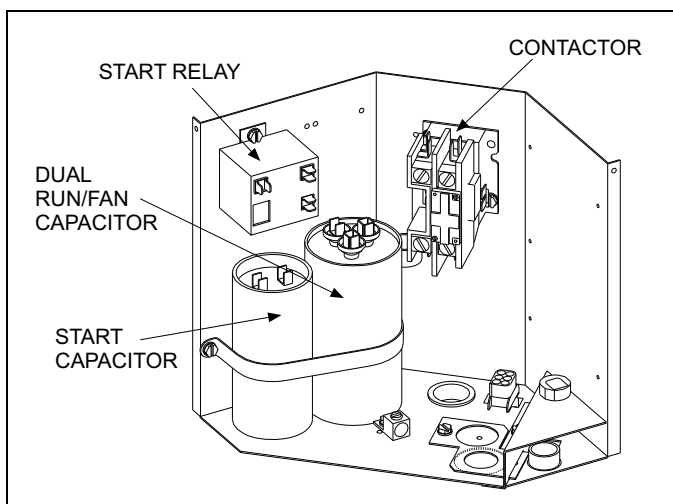


FIGURE 1

SECTION B

E*BD, E*RD, ERHQ, ERHS & HP0**X13 SERIES SPLIT HEAT PUMPS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the two pilot holes on the left angled side to attach start relay. See Figure 2.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

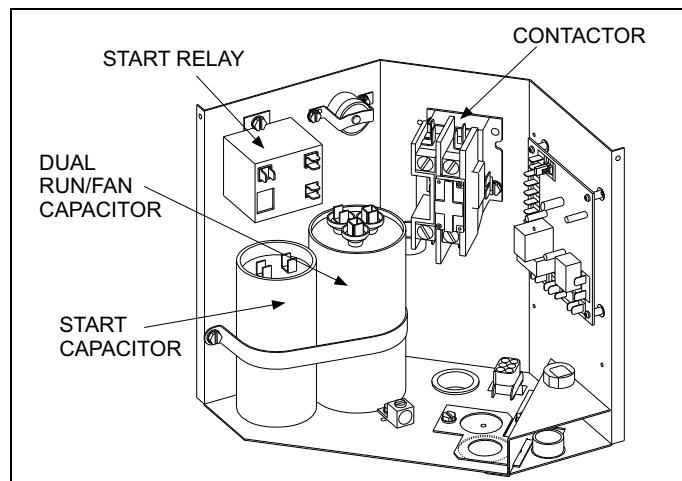


FIGURE 2

SECTION C

AC3A, AC3B, AC5B, AC6B, AC8B, AL3A, AL3B, AL5B, AL6B, AL8B, CMB, CZB, CZE, CZF & CZH SERIES SPLIT AIR CONDITIONERS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the two pilot holes on the left side to attach start relay. See Figure 3.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.

3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on access panel.

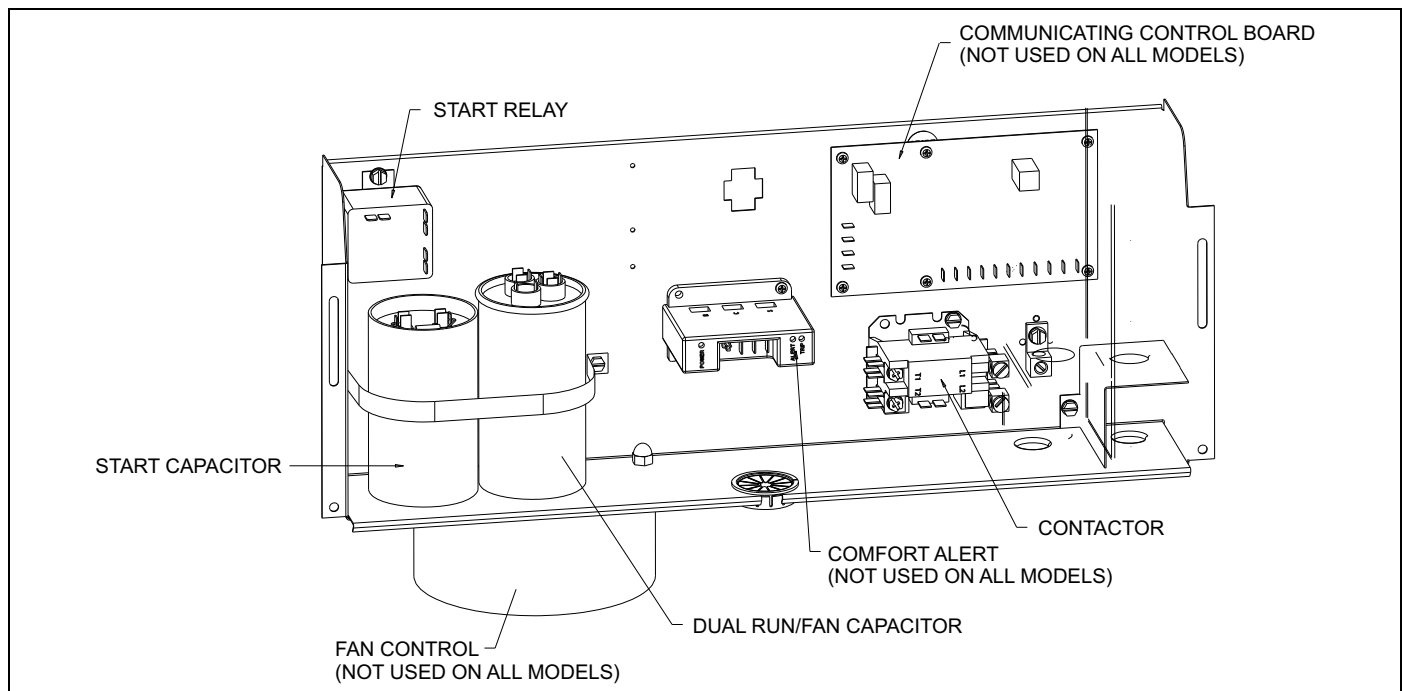


FIGURE 3

SECTION D

HC3A, HC3B, HC5B, HC6B, HC8B, HL3A, HL3B, HL5B, HL6B, HL8B, YMB, YZB, YZE, YZF & YZH SERIES SPLIT HEAT PUMPS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the two pilot holes on the left side to attach start relay. See Figure 4.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.

3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on access panel.

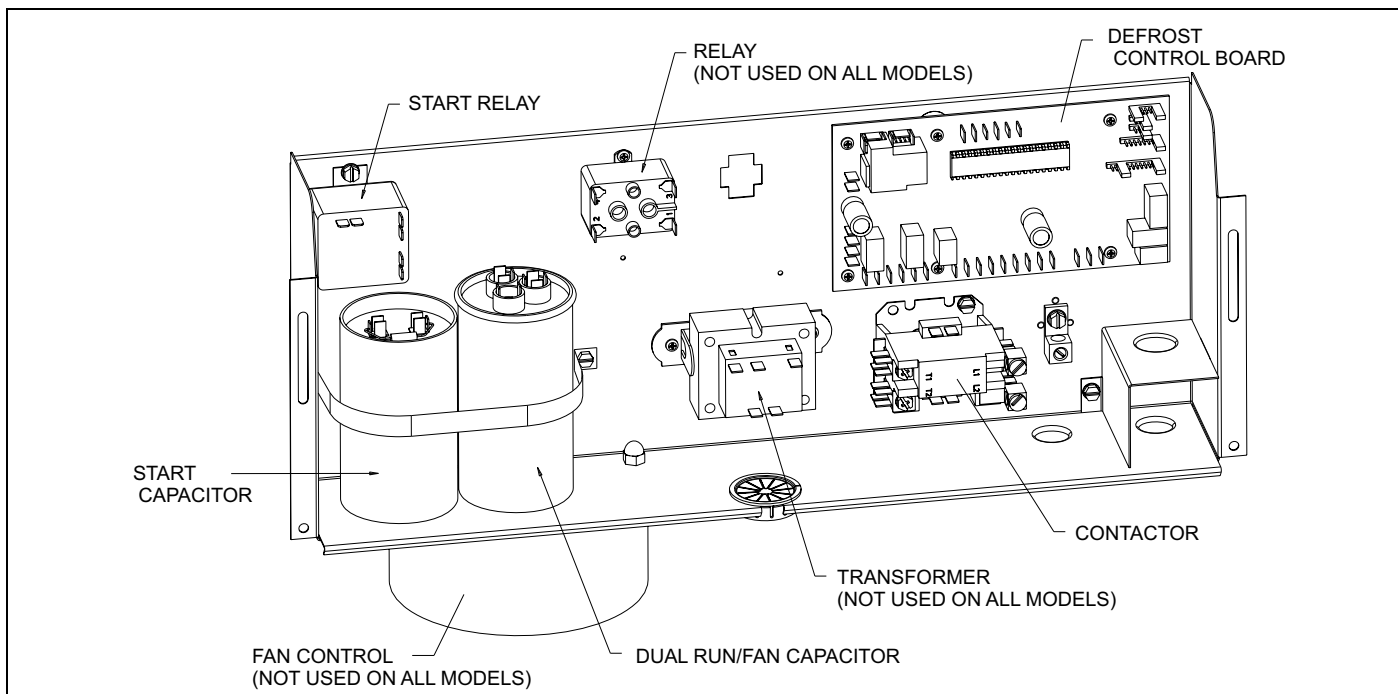


FIGURE 4

SECTION E

AM & AY SERIES SPLIT AIR CONDITIONERS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the two pilot holes to attach start relay. See Figure 5.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

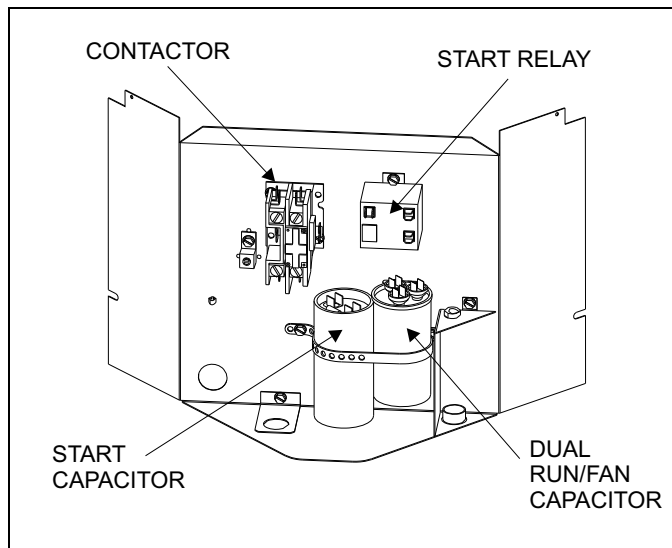


FIGURE 5

SECTION F

CCGD, CCJD, CCJF, GCGD, LCJD, LCJF, TCGD, TCGF, TCJD, TCJF, YCJD, YCJF & RAC SERIES SPLIT AIR CONDITIONERS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the pilot hole behind start relay sticker to attach start relay. see Figure 6.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

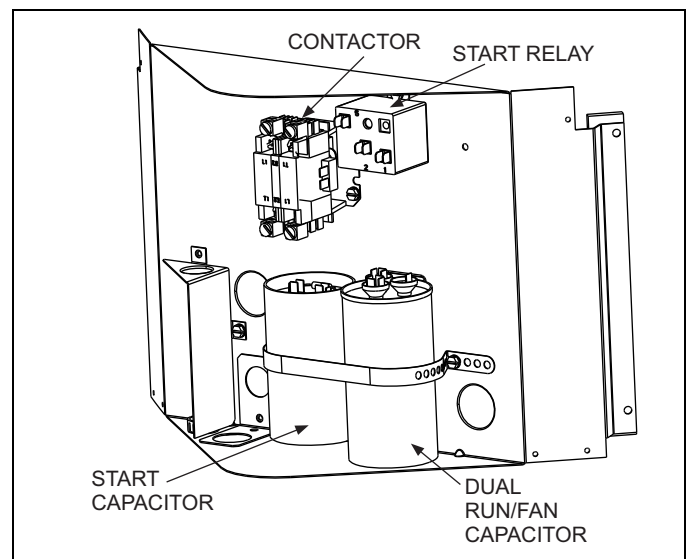


FIGURE 6

SECTION G

CHGD, CHJD, CHJF, GHGD, GHGF, GHRD,
LHJD, LHJF, THGD, THGF, THJD, THJF, THJR,
THRD, YHJD, YHJF, YHJR & RHP SERIES
SPLIT HEAT PUMPS

Pre-drilled pilot holes are provided in the control box.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the pilot hole behind start relay sticker to attach start relay. see Figure 7.
2. Place the start capacitor beside the dual capacitor using one capacitor strap fastened to pilot holes provided in control box to secure both capacitors in place.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.

7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

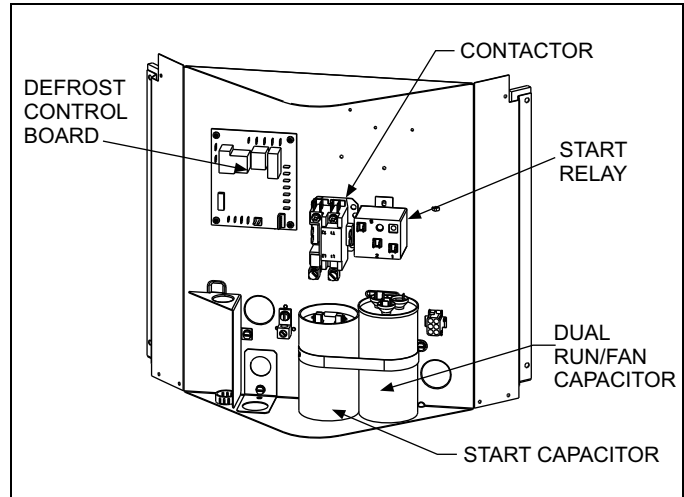


FIGURE 7

SECTION H

YCHD AND TCHD SERIES SPLIT AIR CONDITIONERS.

Pre-drilled pilot holes are provided in the unit.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the pilot hole behind start relay sticker to attach start relay. see Figures 8 & 9.
2. Use the pilot holes on the control panel to attach the start capacitor bracket. Put the end cap on the start capacitor. Make sure the wires pass through the notch in the cap and are not pinched. Mount the start capacitor to the start capacitor bracket as shown.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

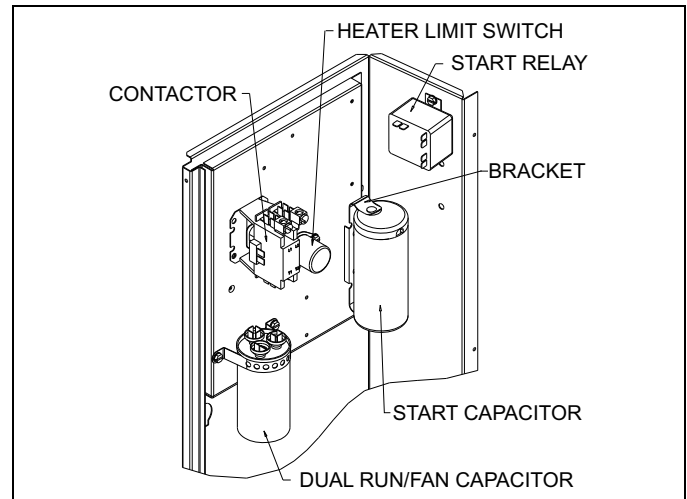


FIGURE 8: 18 & 24 BTU

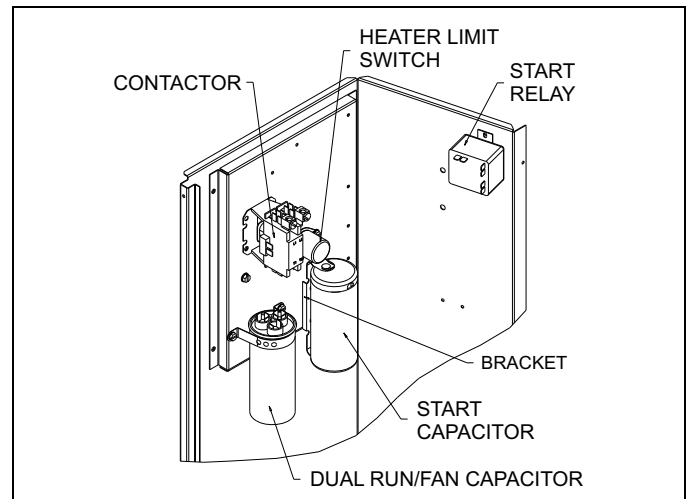


FIGURE 9: 30, 36, 48, & 60 BTU

SECTION J

YCE, YCS, TC4B, RAC, RAW, TW4B, YFE, TF4B, YCD, AND TC3B SERIES SPLIT AIRCONDITIONERS.

Pre-drilled pilot holes are provided in the unit.

NOTICE

On units which have a solid state start device, remove the device and the red and brown wiring connections to the dual capacitor.

1. Use the pilot hole behind start relay sticker to attach start relay. see Figures 10 & 11.
2. Use the pilot holes on the control panel to attach the start capacitor bracket. Put the end cap on the start capacitor. Make sure the wires pass through the notch in the cap and are not pinched. Mount the start capacitor to the start capacitor bracket as shown.
3. Attach the black lead wire from the Hard Start Kit relay #5 terminal to T1 terminal of the contactor.
4. Attach the red lead wire from the Hard Start Kit capacitor to T2 terminal of the contactor.
5. Locate the brown wire connecting the dual capacitor "HERM" to the S (start) terminal on the compressor.
6. Attach the brown lead wire from the Hard Start Kit relay #2 terminal to the same terminal on the dual capacitor which was identified in Step 5. See Figure 12.
7. The yellow lead wire should be factory connected between Hard Start Kit relay #1 terminal to Hard Start Kit capacitor.

NOTICE

The wiring of the capacitor and relay must agree with Figure 12. Also, see wiring diagram on control box cover.

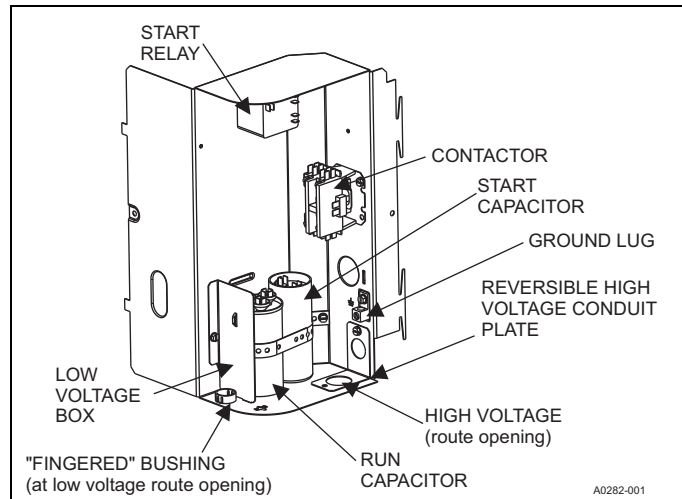


FIGURE 10: 18 BTU

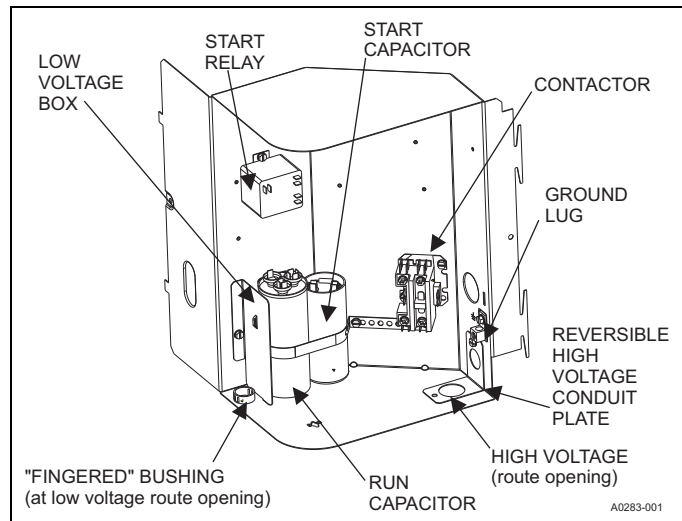


FIGURE 11: 24, 30, 36, 48, & 60 BTU

Hard Start Kit Model No.	Component Ratings								
	Start Relay								Start Capacitor
	Hot Pick Up		Cold Pick Up		Drop Out		Coil Volts	Amp Rating	$\mu\text{F/V}$
	Min	Max	Min	Max	Min	Max			
S1-2SA06702006	170	180	162	175	40	90	332	35	145-175 μF / 250 VAC
S1-2SA06704006	170	180	162	175	40	90	332	35	88-108 μF / 330 VAC
S1-2SA06705906	190	200	180	195	40	90	332	35	145-175 μF / 250 VAC
S1-2SA06707906	140	150	132	148	40	90	332	35	161-193 μF / 250 VAC
S1-2SA06708006	140	150	132	148	40	90	332	35	88-108 μF / 330 VAC
S1-2SA06708106	190	200	180	193	40	90	332	35	189-227 μF / 330 VAC
S1-2SA06708506	220	240	203	231	35	77	253	35	189-227 μF / 330 VAC
S1-2SA06708606	260	280	240	269	35	77	253	35	189-227 μF / 330 VAC
S1-2SA06708706	240	260	224	252	40	90	332	50	324-388 μF / 330 VAC
S1-2SA06708906	140	150	132	148	40	90	332	35	189-227 μF / 250 VAC
S1-2SA06709206	160	170	152	166	40	90	332	35	145-175 μF / 330 VAC
S1-2SA06709306	150	160	142	157	40	90	332	35	145-175 μF / 250 VAC
S1-2SA06709406	140	150	132	148	40	90	332	35	270-324 μF / 330 VAC
S1-2SA06709506	170	180	162	175	40	90	332	35	189-227 μF / 330 VAC
S1-2SA06721706	200	220	186	215	40	90	332	35	145-175 μF / 330 VAC
S1-2SA06708206	170	180	162	175	40	90	332	35	270-324 μF / 330 VAC
S1-2SA06708306	200	220	186	215	40	90	332	35	161-193 μF / 250 VAC
S1-2SA06708406	280	300	261	290	50	100	332	50	270-324 μF / 330 VAC
S1-2SA06709006	300	320	279	308	50	110	375	35	270-324 μF / 330 VAC
S1-2SA06709106	290	310	268	298	50	100	332	35	270-324 μF / 330 VAC
S1-2SA06709606	240	260	224	252	40	90	332	35	145-175 μF / 250 VAC
S1-2SA06709706	240	260	224	252	40	90	332	35	161-193 μF / 250 VAC
S1-2SA06709806	240	260	224	252	40	90	332	35	270-324 μF / 330 VAC
S1-2SA06709906	150	160	140	152	35	77	332	35	88-108 μF / 330 VAC
S1-2SA06706706	180	190	171	184	40	90	332	34	145-175 μF / 330 VAC
S1-2SA06706906	160	170	152	166	40	90	332	35	145-175 μF / 330 VAC
S1-2SA06707006	140	150	132	148	40	90	332	35	189-227 μF / 250 VAC
S1-2SA06710206	190	200	180	193	40	90	332	35	189-227 μF / 330 VAC
S1-2SA06710106	170	180	162	175	40	90	332	35	88-108 μF / 330 VAC
S1-2SA06721806	140	150	132	148	40	90	332	35	88-108 μF / 330 VAC
S1-2SA06721906	200	220	186	215	40	90	332	35	145-175 μF / 330 VAC

Wiring Diagram

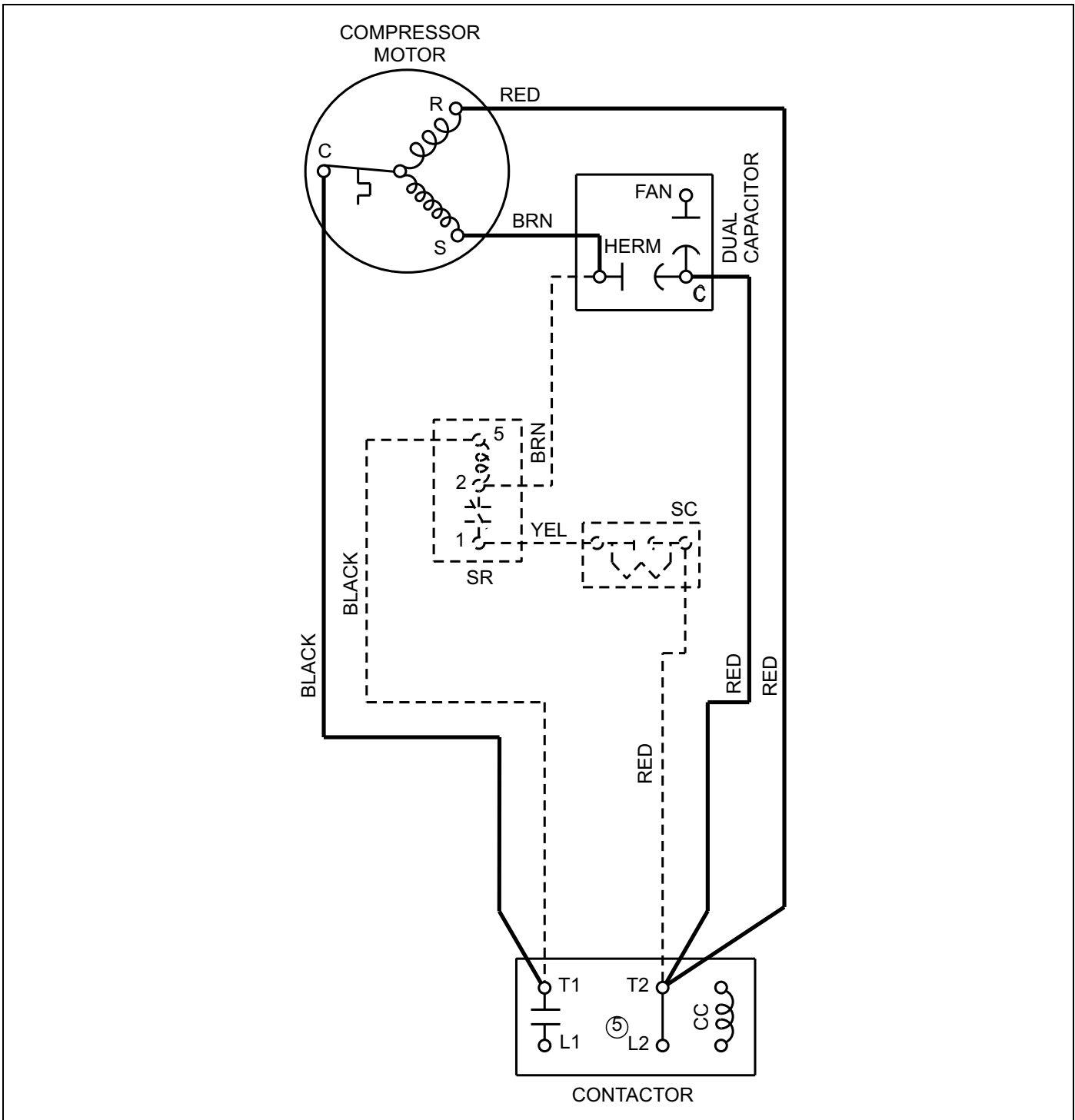


FIGURE 12: Universal Wiring Diagram