

Parts & Supplies

Carrier Interamerica Corporation International Parts & Supplies

















TABLE OF CONTENTS

Air Movement
Belts and Pulleys
Chemicals and Lubricants
Compressors
Copper
Electrical
Indoor Air Quality
Installation & HVAC Supplies
Motors
Thermostats Controls
Tools, Hardware & Accesories
Refrigeration Equipment 63-69



MOTORS



PARTS AND SUPPLIES







CO	NDENSER FAN
PRODUCT #	DESCRIPTION
TT-C16-1SP2	COND 1SP 1075 230V 1/6HP
TT-C25-1SP2	COND 1SP 1075 230V 1/4HP
TT-C25-1SP2HT	COND 70C 1SP 1075 230V 1/4
TT-C25-1SP3HT	COND 70C 1SP 825 230V 1/4
TT-C33-1SP2	COND 1SP 1075 230V 1/3HP
TT-C33-1SP2HT	COND 70C 1SP 1075 230V 1/3
TT-C33-1SP3HT	COND 70C 1SP 825 230V 1/3
TT-C33-MSP2	COND 1/3HP MULTI MOTOR
TT-C33-MSP3	COND 1/3HP RESCUE 825RPM
TT-C50-1SP2	COND 1SP 1075 230V 1/2HP
TT-C50-1SP2HT	COND 70C 1SP 1075 230V 1/2
TT-C50-MSP2	COND 1/2HP MULTI MOTOR
TT-C75-1SP2	COND 1SP 1075 230V 3/4HP

	EVAPORATOR
PRODUCT #	DESCRIPTION
TT-E25-3SP1	EVAP 3SP 1075 115V 1/4HP
TT-E25-3SP2	EVAP 3SP 1075 230V 1/4HP
TT-E33-3SP1	EVAP 3SP 1075 115V 1/3HP
TT-E33-3SP2	EVAP 3SP 1075 230V 1/3HP
TT-E50-3SP1	EVAP 3SP 1075 115V 1/2HP
TT-E50-3SP2	EVAP 3SP 1075 230V 1/2HP
TT-E50-MSP1	EVAP 1/2HP MULTI MOTOR 115V
TT-E50-MSP2	EVAP 1/2HP MULTI MOTOR
TT-E75-3SP1	EVAP 3SP 1075 115V 3/4HP
TT-E75-3SP2	EVAP 3SP 1075 230V 3/4HP
TT-E75-MSP1	EVAP 3/4HP MULTI MOTOR
TT-E75-MSP2	EVAP 3/4HP MULTI MOTOR







MOTORS

Features and Benefits



Bright, colorful, easy to read packaging removes confusion about motors additionally, the distributor can easily identify the stock of motors on the shelf. The application, voltage, and horsepower of a motor are visible at a glance



A unique styrofoam cradle inside the carton supports and protects the motor shaft, and mounting bolts during shipment.



For your convenience, TopTech provides a complete manufacturer cross-reference on the side of every motor carton.



The motor carton has been designed with an innovative handle to make the motors much easier to carry



The appropriate size 370 VAC run capacitor is noted on every motor carton.



An extra large wiring diagram supplied on the motor carton, as well as in the installation and safety instruction sheet, is highly visible and very easy to read.



Informative product label contains the motor model number in large type. The UPC is also printed on every motor label.



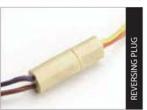
Extended mounting bolts provide for easier installation in cramped spaces. With the longer bolts, the installer is able to more easily start the threaded mounting nut.



TopTech motor wires are thirty inches long. The added length makes it easier for the contractor to install the new motor.



Partial stripping leaves the insulation on the motor connection wire. This protects the stranded copper wire and prevents damage to individual strands.



The electrical reversing plug simplifies rotation direction changes.



Run capacitor connections are insulated for increased safety. Flag disconnects on condenser fan motors and inline disconnects on direct drive furnace blower motors are provided.



Allows the contractor and distributor to consolidate multiple part codes into a single stocking unit. Carry one motor that can replace a wide variety of OEM and other replacement motors, saving time and money.

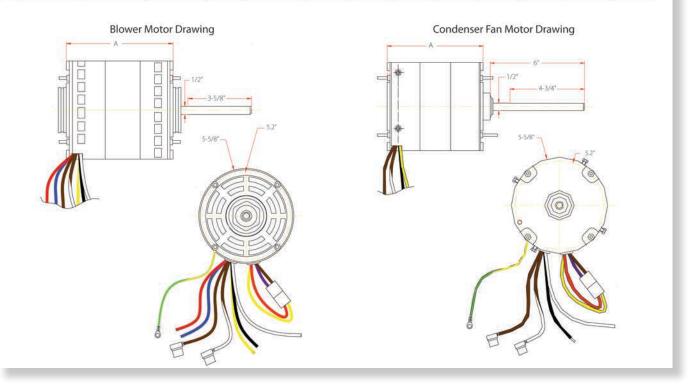




Technical Specifications

	Part Number	НР	Voltage	Amps	Speed	Capacitor	Bearing	Size "A"	Total weight
ors	TT-E25-3SP1	1/4hp	115V 60HZ	4.60	1075/3	5uF/370V	SLEEVE	4.213"	10
Moto	TT-E25-3SP2	1/4hp	208/230V 60Hz	2.20	1075/3	5uF/370V	SLEEVE	4.213"	12
l e	TT-E33-3SP1	1/3hp	115V 60HZ	6.70	1075/3	5uF/370V	SLEEVE	4.469"	12
3lov	TT-E33-3SP2	1/3hp	208/230V 60Hz	2.90	1075/3	5uF/370V	SLEEVE	4.469"	12
Se	TT-E50-3SP1	1/2hp	115V 60HZ	10.20	1075/3	5uF/370V	SLEEVE	5.472"	16.28
ırna	TT-E50-3SP2	1/2hp	208/230V 60Hz	5.00	1075/3	5uF/370V	SLEEVE	5.217"	16.28
Direct Drive Furnace Blower Motors	TT-E75-3SP1	3/4hp	115V 60HZ	11.30	1075/3	15uF/370V	SLEEVE	5.472"	19.36
	TT-E75-3SP2	3/4hp	208/230V 60Hz	5.40	1075/3	10uF/370V	SLEEVE	5.472"	19.36
ect	TT-E10-3SP1	1 HP	115V 60HZ	12.60	1075/3	20uF/370V	BALL	6.122"	22
ğ	TT-E10-3SP2	1 HP	208/230V 60HZ	5.59	1075/3	15uF/370V	BALL	5.728"	22
Fan	TT-C16-1SP2	1/6hp	208/230V 60Hz	1.30	1075/1	5uF/370V	SLEEVE	4.25"	9.46
r E	TT-C25-1SP2	1/4hp	208/230V 60Hz	2.20	1075/1	5uF/370V	SLEEVE	4.25"	12
Condenser Motors	TT-C33-1SP2	1/3hp	208/230V 60Hz	2.80	1075/1	7.5uF/370V	SLEEVE	4.52"	12
M	TT-C50-1SP2	1/2hp	208/230V 60Hz	4.20	1075/1	10uF/370V	SLEEVE	5.29"	16.28
ŏ	TT-C75-1SP2	3/4hp	208/230V 60Hz	4.50	1075/1	10uF/370V	SLEEVE	5.75"	22

	Part Number	Voltage	Speed	Capacitor	Bearing	(1) HP FLA	(2) HP FLA	(3) HP FLA	(4) HP FLA	(5) HP FLA	Size "A"	Total weight
Drive ace Motor	TT-E50-MSP2	208/230V 60Hz	1075/4	10uF/370V	BALL	1/2 - 7.0	1/3 - 6.7	1/4 - 4.4	1/5 - 3.2	1/6 - 2.4	4.862"	17.16
Dri Mo	TT-E50-MSP1	115V 60HZ	1075/4	10uF/370V	BALL	1/2 - 3.9	1/3 - 3.6	1/4 - 2.5	1/5 - 1.8	1/6 - 1.3	4.862"	17.16
Direct Furr Slower	TT-E75-MSP1	115V 60HZ	1075/4	10(20)uF/370V	BALL	3/4 - 8.1	1/2 - 6.6	1/3 - 4.6	1/4 - 3.8	1/5 - 3.1	5.708"	18.92
9 B	TT-E75-MSP2	208/230V 60Hz	1075/4	10(20)uF/370V	BALL	3/4 - 3.8	1/2 - 3.7	1/3 - 2.5	1/4 - 1.8	1/5 - 1.7	5.708"	18.92
Motor	TT-C33-MSP2	208/230V 60Hz	1075/2	7.5/5uF/370V	BALL	1/3 - 2.8	1/4 - 2.0	1/5 - 1.7	1/6 - 1.5	N/A	4.53"	13.64
	TT-C33-MSP3	208/230V 60Hz	825/2	10/7.5uF/370V	BALL	1/2 - 3.0	1/3 - 2.5	1/4 - 2.0	1/5 - 1.3	N/A	5.32"	15.84
Con	TT-C50-MSP2	208/230V 60Hz	1075/2	12.5/10uF/370V	BALL	1/3 - 2.1	1/4 - 1.7	1/5 - 1.5	1/6 - 1.2	N/A	5.32"	14.52



MOTORS

Why Sell TopTech Motors

TopTech motors are 100% functionally tested during manufacturing and then retested after final assembly for everything from input power to Hi-Pot and continuity testing.

TopTech motors require compliance verification of incoming raw materials for dimensional, mechanical, and specifications identified in the drawing and quality procedure.

TopTech furnace blower motors are rated for higher ambient temperature so they can be used in more applications and in more regions.

Application	НР	Voltage	Speed	370V Capacitor	TopTech	Mars	Packard	Gemline	Marathon	AO Smith	Fasco	Emersor	Smart
	3/4	208-230	1075/	1 10	TT-C75-1SP2	03731				FSE1076S	D929	1868	SE3731
	1/2	208-230	1075/	1 10	TT-C50-1SP2	03730	63130	EM3730	X221	FSE1056S	D907	1862	SE3730
r r	1/3	208-230	1075/	7.5	TT-C33-1SP2	03729	63129	EM3729	X214	FSE1036S	D908	1861	SE3729
Aot	1/4	208-230	1075/	1 5	TT-C25-1SP2	03728	63128	EM3728	X213	FSE1026S	D909	1860	SE3728
Condenser Fan Motor	1/6	208-230	1075/	1 5	TT-C16-1SP2	03727			X411	FSE1016S	D905	1859	SE3727
ΩÜ	1/6 to 1/3	208-230	1075/2	2	TT-C33-MSP2					FE6000	D2827	5462	SE3465
	1/5 to 1/2	208-230	1075/2	2	TT-C50-MSP2					FE6002		5465	SE3468
	1/6 to 1/3	208-230	825/2		TT-C33-MSP3					FE6001	D2826	5464	SE3469
	1.	115	1075/3	3 20	TT-E10-3SP1	03595				BDL1106		8906	
	1	208-230	1075/3	3 15	TT-E10-3SP2	03596			X023	BD1106		8907	
	3/4	115	1075/3	3 15	TT-E75-3SP1	03589		EM3589	X009	DL1076	D728	8904	SE3589
0	3/4	208-230	1075/3	3 10	TT-E75-3SP2	03590	63990	EM3590	X010	D1076	D729	8905	SE3590
Furnace otor	1/2	115	1075/3	3 5	TT-E50-3SP1	03587	63987	EM3587	X004	FDL1056	D701	1865	SE3587
e Furn Motor	1/2	208-230	1075/3	3 5	TT-E50-3SP2	03588	63988	EM3588	X005	FD1056	D703	1973	SE3588
ωΣ	1/3	115	1075/3	3 5	TT-E33-3SP1	03585		EM3585	X005	FDL1036	D727	1864	SE3585
act Drive Blower N	1/3	208-230	1075/3	3 5	TT-E33-3SP2	03586	63986	EM3586	X003	FD1036	D923	1972	SE3586
	1/4	115	1075/3	3 5	TT-E25-3SP1	03583	63983	EM3583		FDL1026	D721	1863	SE3583
Direct Blo	1/4	208-230	1075/3	3 5	TT-E25-3SP2	03584	63984	EM3584	X001	D1026	D725	1971	SE3584
	1/6 to 1/2	115	1075/4	4	TT-E50-MSP1					FDL6001	D2835	5460	SE3463
	1/6 to 1/2	208-230	1075/4	4	TT-E50-MSP2					FDL6000	D833	5461	
	1/5 to 3/4	115	1075/4	4	TT-E75-MSP1					FDL6002	D2832	5470	SE3466
	1/5 to 3/4	208-230	1075/4	4	TT-E75-MSP2					FD6001	D2833	5471	SE3467

Cross Reference Guidelines

- Horsepower must be within +/- 10% of OEM
- Replacement motor voltage must match OEM exactly
- Minimum current rating should equal OEM maximum and should not exceed + 10%
- Speed should be within +/- 10% of OEM
- Capacitor value should match value on replacement motor label

Mars, Packard, Gemline, Marathon, Fasco, AO Smith, and Emerson are trademarks of their respective owners. Reasonable effort has been made to assure the accuracy of cross-reference information. However, final evaluation for suitable replacement is left to the installer.

Providing HVAC Motors

For Over 50 Years



When it comes to heating, cooling, and ventilation motors, few can match A. O. Smith's commitment to comfort. Whether it is a tough outdoor condenser fan, or an indoor blower application, our dependable product line is up to the task.

As an installer, service technician, or contractor, you need a comprehensive motor line backed by a company that will be there in the future. A. O. Smith is that company, and we've been committed to the electric motor industry since 1940.

Maybe that is why A. O. Smith is one of the leading independent suppliers of motors to the air conditioning industry.

Your one

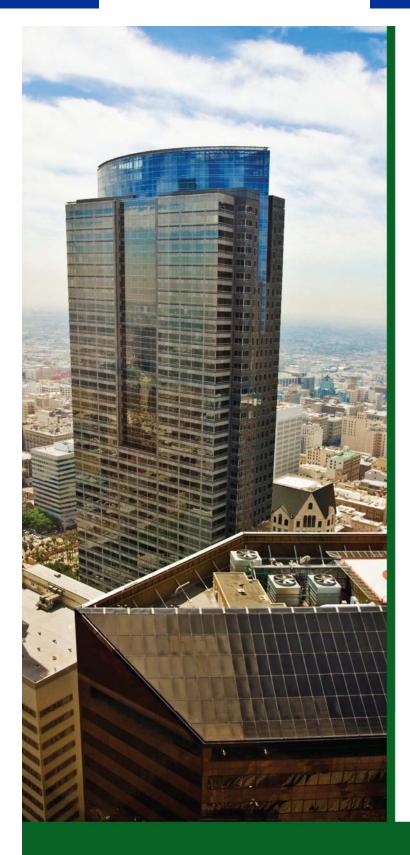
QUALITY

source for HVAC motor solutions



Copyright © 2010 A. O. Smith Corporation

BELTS & PULLEYS





V-belt Drives and Bearings Product Guide





EMERSON. CONSIDER IT SOLVED.





	COPPER
PRODUCT	DESCRIPTION
COP1/2X20	COPPER ACR 1/2X20 FT
COP1/2X50	COPPER 1/4 ROLL
COP1/4X50	COPPER ACR 11/8X20 FT
COP1-1/8X20	COPPER ROLL 1-1/8X50
COP1-1/8X50	COPPER ACR 1-3/8X20 FT
COP1-5/8X20	COPPER ACR 1-5/8X20 FT
COP2-1/8X20	COPPER ACR 2-1/8X20 FT
COP2-5/8X20	COPPER ACR 2-5/8 FT
COP3/16X50	COPPER 3/16 ROLL
COP3/4X20	COPPER ACR 3/4 X20 FT
COP3/4X50	COPPER ROLL 3/4 X50
COP3/8X20	COPPER ACR 3/8X20 FT
COP3/8X50	COPPER 5/8 ROLL
COP5/16X50	COPPER 5/16 ROLL
COP5/8X20	COPPER ACR 5/8X20 FT
COP5/8X50	COPPER 5/8 ROLL
COP7/8X20	COPPER ACR 7/8X20 FT
COP7/8X50	COPPER 7/8 ROLL







ELECTRICAL

RUN CAPACITORS

	ROUND
PRODUCT #	DESCRIPTION
TT-CAP-3/370	3 MFD 370 VOLT
TT-CAP-3/440	3 MFD 440 VOLT
TT-CAP-4/370	4 MFD 370 VOLT
TT-CAP-4/440	4 MFD 440 VOLT
TT-CAP-5/370	5 MFD 370 VOLT
TT-CAP-5/440	5 MFD 440 VOLT
TT-CAP-7.5/370	7.5 MFD 370 VOLT
TT-CAP-7.5/440	7.5 MFD 440 VOLT
TT-CAP-10/370	10 MFD 370 VOLT
TT-CAP-10/440	10 MFD 440 VOLT
TT-CAP-12.5/370	12.5 MFD 370 VOLT
TT-CAP-12.5/440	12.5 MFD 440 VOLT
TT-CAP-15/370	15 MFD 370 VOLT
TT-CAP-15/440	15 MFD 440 VOLT
TT-CAP-20/370	20 MFD 370 VOLT
TT-CAP-20/440	20 MFD 440 VOLT
TT-CAP-25/370	25 MFD 370 VOLT
TT-CAP-25/440	25 MFD 440 VOLT
TT-CAP-30/370	30 MFD 370 VOLT
TT-CAP-30/440	30 MFD 440 VOLT
TT-CAP-35/370	35 MFD 370 VOLT
TT-CAP-35/440	35 MFD 440 VOLT
TT-CAP-40/370	40 MFD 370 VOLT
TT-CAP-40/440	40 MFD 440 VOLT
TT-CAP-45/370	45 MFD 370 VOLT
TT-CAP-45/440	45 MFD 440 VOLT
TT-CAP-50/370	50 MFD 370 VOLT
TT-CAP-50/440	50 MFD 440 VOLT
TT-CAP-55/370	55 MFD 370 VOLT

ROUND				
PRODUCT #	DESCRIPTION			
TT-CAP-55/440	55 MFD 440 VOLT			
TT-CAP-60/370	60 MFD 370 VOLT			
TT-CAP-60/440	60 MFD 440 VOLT			
TT-CAP-80/370	80 MFD 370 VOLT			
TT-CAP-5/370R	5 MFD 370 VOLT ROUND			
TT-CAP-45/370R	45 MFD 370 VOLT ROUND			
TT-CAP-45/440R	45 MFD 440 VOLT ROUND			
TT-CAP-55/440R	55 MFD 440 VOLT ROUND			
TT-CAP-60/440R	60 MFD 440 VOLT ROUND			
TT-CAP-80/440R	80 MFD 440 VOLT ROUND			







-	NIAI
	DESCRIPTION
PRODUCT #	DESCRIPTION
TT-CAP-10/10/370	10 & 10 MFD 370 VOLT
TT-CAP-15/4/370	15 & 4 MFD 370 VOLT
TT-CAP-15/5/370	15 & 5 MFD 370 VOLT
TT-CAP-20/5/370	20 & 5 MFD 370 VOLT
TT-CAP-20/5/440	20 & 5 MFD 440 VOLT
TT-CAP-25/5/370	25 & 5 MFD 370 VOLT
TT-CAP-25/5/440	25 & 5 MFD 440 VOLT
TT-CAP-25/10/370	25 & 10 MFD 370 VOLT
TT-CAP-25/15/440	25 & 15 MFD 440 VOLT
TT-CAP-30/3/370	30 & 3 MFD 370 VOLT
TT-CAP-30/5/370	30 & 5 MFD 370 VOLT
TT-CAP-30/5/440	30 & 5 MFD 440 VOLT
TT-CAP-30/7.5/440	30 & 7.5 MFD 440 VOLT
TT-CAP-35/3/370	35 & 3 MFD 370 VOLT
TT-CAP-35/3/440	35 & 3 MFD 440 VOLT
TT-CAP-35/5/370	35 & 5 MFD 370 VOLT
TT-CAP-35/5/440	35 & 5 MFD 440 VOLT
TT-CAP-35/7.5/370	35 & 7.5 MFD 370 VOLT
TT-CAP-35/7.5/440	35 & 7.5 MFD 440 VOLT
TT-CAP-40/3/370	40 & 3 MFD 370 VOLT
TT-CAP-40/5/370	40 & 5 MFD 370 VOLT
TT-CAP-40/5/440	40 & 5 MFD 440 VOLT
TT-CAP-40/7.5/440	40 & 7.5 MFD 440 VOLT
TT-CAP-45/10/370	45 & 10 MFD 370 VOLT
TT-CAP-45/5/370	45 & 5 MFD 370 VOLT
TT-CAP-45/5/440	45 & 5 MFD 440 VOLT
TT-CAP-45/7.5/370	45 & 7.5 MFD 370 VOLT
TT-CAP-45/7.5/440	45 & 7.5 MFD 440 VOLT
TT-CAP-50/5/370	50 & 5 MFD 370 VOLT
TT-CAP-50/5/440	50 & 5 MFD 440 VOLT
TT-CAP-50/7.5/440	50 & 7.5 MFD 440 VOLT

DUAL							
PRODUCT #	DESCRIPTION						
TT-CAP-55/5/370	55 & 5 MFD 370 VOLT						
TT-CAP-55/5/440	55 & 5 MFD 440 VOLT						
TT-CAP-55/7.5/370	55 & 7.5 MFD 370 VOLT						
TT-CAP-60/10/440	60 & 10 MFD 440 VOLT						
TT-CAP-60/5/370	60 & 5 MFD 370 VOLT						
TT-CAP-80/5/370	80 & 5 MFD 370 VOLT						
TT-CAP-80/5/440	80 & 5 MFD 440 VOLT						





ELECTRICAL

DL	JAL ROUND
PRODUCT #	DESCRIPTION
TT-CAP-15/5/440R	15 & 5 MFD 440 VOLT ROUND
TT-CAP-20/5/370R	20 & 5 MFD 370 VOLT ROUND
TT-CAP-20/5/440R	20 & 5 MFD 440 VOLT ROUND
TT-CAP-25/3/370R	25 & 3 MFD 370 VOLT ROUND
TT-CAP-25/5/370R	25 & 5 MFD 370 VOLT ROUND
TT-CAP-25/5/440R	25 & 5 MFD 440 VOLT ROUND
TT-CAP-25/7.5/370R	25 & 7.5 MFD 370 VOLT ROUND
TT-CAP-25/7.5/440R	25 & 7.5 MFD 440 VOLT ROUND
TT-CAP-30/3/370R	30 & 3 MFD 370 VOLT ROUND
TT-CAP-30/5/370R	30 & 5 MFD 370 VOLT ROUND
TT-CAP-30/5/440R	30 & 5 MFD 440 VOLT ROUND
TT-CAP-30/7.5/370R	30 & 7.5 MFD 370 VOLT ROUND
TT-CAP-35/3/370R	35 & 3 MFD 370 VOLT ROUND
TT-CAP-35/3/440R	35 & 3 MFD 440 VOLT ROUND
TT-CAP-35/5/370R	35 & 5 MFD 370 VOLT ROUND
TT-CAP-35/5/440R	35 & 5 MFD 440 VOLT ROUND
TT-CAP-35/7.5/370R	35 & 7.5 MFD 370 VOLT ROUND
TT-CAP-35/7.5/440R	35 & 7.5 MFD 440 VOLT ROUND
TT-CAP-40/3/370R	40 & 3 MFD 370 VOLT ROUND
TT-CAP-40/3/440R	40 & 3 MFD 440 VOLT ROUND
TT-CAP-40/5/370R	40 & 5 MFD 370 VOLT ROUND
TT-CAP-40/5/440R	40 & 5 MFD 440 VOLT ROUND
TT-CAP-40/7.5/370R	40 & 7.5 MFD 370 VOLT ROUND
TT-CAP-40/7.5/440R	40 & 7.5 MFD 440 VOLT ROUND
TT-CAP-45/5/370R	45 & 5 MFD 370 VOLT ROUND
TT-CAP-45/5/440R	45 & 5 MFD 440 VOLT ROUND
TT-CAP-45/7.5/370R	45 & 7.5 MFD 370 VOLT ROUND
TT-CAP-45/7.5/440R	45 & 7.5 MFD 440 VOLT ROUND
TT-CAP-45/10/370R	45 & 10 MFD 370 VOLT ROUND
TT-CAP-50/5/370R	50 & 5 MFD 370 VOLT ROUND
TT-CAP-50/5/440R	50 & 5 MFD 440 VOLT ROUND

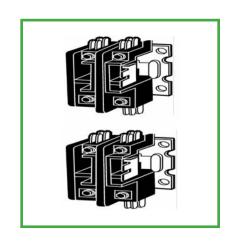
DL	JAL ROUND
PRODUCT #	DESCRIPTION
TT-CAP-50/7.5/370R	50 & 7.5 MFD 370 VOLT ROUND
TT-CAP-55/4/440R	55 & 4 MFD 440 VOLT ROUND
TT-CAP-55/5/370R	55 & 5 MFD 370 VOLT ROUND
TT-CAP-55/5/440R	55 & 5 MFD 440 VOLT ROUND
TT-CAP-55/7.5/370R	55 & 7.5 MFD 370 VOLT ROUND
TT-CAP-55/7.5/440R	55 & 7.5 MFD 440 VOLT ROUND
TT-CAP-55/10/370R	55 & 10 MFD 370 VOLT ROUND
TT-CAP-60/5/370R	60 & 5 MFD 370 VOLT ROUND
TT-CAP-60/5/440R	60 & 5 MFD 440 VOLT ROUND
TT-CAP-60/7.5/370R	60 & 7.5 MFD 370 VOLT ROUND
TT-CAP-60/7.5/440R	60 & 7.5 MFD 440 VOLT ROUND
TT-CAP-60/10/440R	60 & 10 MFD 440 VOLT ROUND
TT-CAP-80/5/370R	80 & 5 MFD 370 VOLT ROUND
TT-CAP-80/5/440R	80 & 5 MFD 440 VOLT ROUND
TT-CAP-80/7.5/370R	80 & 7.5 MFD 370 VOLT ROUND
TT-CAP-80/10/370R	80 & 10 MFD 370 VOLT ROUND





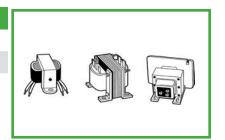
CONTACTORS

24 VAC				
PRODUCT #	DESCRIPTION			
TT-CON-1/24/30	1POLE 24VAC 30AMP			
TT-CON-1/24/40	1POLE 24VAC 40AMP			
TT-CON-2/24/30	2POLE 24VAC 30AMP			
TT-CON-2/24/40	2POL 24VAC 40AMP			
TT-CON-3/24/30	3POLE 24VAC 30			
TT-CON-3/24/40	3POLE 24VAC 40AMP			



TRANSFORMERS

	24 VAC
PRODUCT #	DESCRIPTION
TT-TRANS-115/208/240-40	115/208/240 40VA
TT-TRANS-115/208/240-75	115/208/240/ 480 75VA



DISCONNECT & WHIPS

DISCONNECTS		
PRODUCT #	DESCRIPTION	
TT-30AMP-F	30 AMP DISCONNECT FUSED	
TT-60AMP-F	TOPTECH 60 AMP DISCONNECT FUSED	
TT-60AMP-NF	TOPTECH 60 AMP DISCONNECT NON-FUSED	

WHIPS		
PRODUCT #	DESCRIPTION	
TT-WHIP-1/2X6NM	TOPTECH WHIP NON-METALLIC 1/2X6	
TT-WHIP-3/4X6NM	TOPTECH WHIP NON-METALLIC 3/4X6	







ELECTRICAL

SAFETY SWITCHES		
PRODUCT #	DESCRIPTION	
TT-SS1	3/4" SAFE T SWITCH	
TT-SS2	AUX PAN SWITCH	
TT-SS3	CLIPON DRAIN SWITCH	





FAN RELAYS		
PRODUCT #	DESCRIPTION	
TT-90290	SINGLE POLE NORMALLY OPEN	
TT-90293	SINGLE POLE DOUBLE THROW	
TT-90340	DP / DOUBLE THROW SEMI-ENCLOSED	
TT-90370	SINGLE POLE DOUBLE THROW	
TT-90380	1 N.O. / 1 N.C. 24V COIL	



KICKSTARTS		
PRODUCT #	DESCRIPTION	
TT-KS1	3.5 / 5HP 208/230 1PH	
TT-KS8	1 - 3HP 208 / 230 1PH	
TT-TO5	1 - 3HP 208 / 230 1PH	

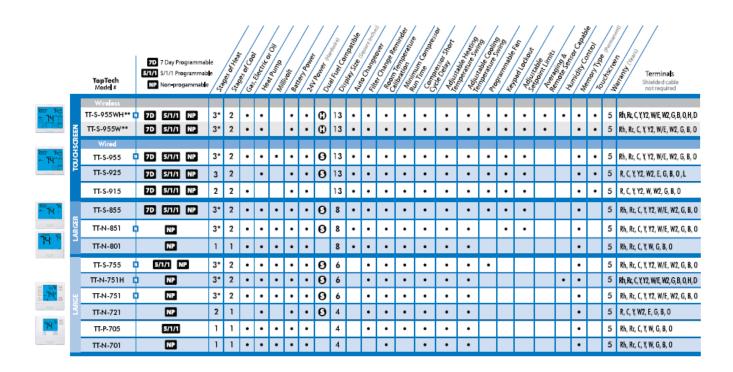






Exclusively for HVAC Professionals!







TT-N-411 Single Stage Heat/ Cool

Non-Programmable

Features

- Dual Powered- Hardwired or Battery
- · Large Display with Bright Blue Backlight
- · Adjustable Temperature Set Point Limits
- Non-Volatile Memory Retains User Settings
- · Easy Acces Front Battery Door
- Separate O & B Terminals
- · Separate Heating and Cooling
- Set Point Temperatures
- Compressor Short Cycle Protection
- ESD Guard™ Electronic Circuitry
- · Front Access Reset Button
- F°/C° Switch
- · Gas/ Electric Fan Switch
- · Mount to Horizontal Box
- · Adjustable Temperature Differential



TT-P-421

Multi-Stage 2 Heat/ 1 Cool Conventional or Heat Pump Thermostat

5-2 Day Programmable

Features

- Dual Powered- Hardwired or Battery
- 5-2 Day Separate Weekday/ Weekend Programming
- Large Display with Bright Blue Backlight
- Adjustable Temperature Set Point Limits
- Non-Volatile Memory Retains User Settings
- Filter Check Monitor
- Adaptive Recovery Mode (ARM™)
- Adjustable 1st and 2nd Stage Temperature Differential
- Compressor Short Cycle Protection
- ESD Guard™ Electronic Circuitry
- Separate Heating and Cooling Set Point Program Times and Temperatures
- Temporary Program Override for 4 Hours or Until Next Set Point
- Programmable Extended Hold Mode
- Front Access Reset Button
- F°/ C° Switch
- Auxiliary Heat Status Indicator
- Mount to Horizontal Box
- Easy Access Front Battery Door
- Separate O & B Terminals
- Meets California Title 24 Guidelines





TT-P-411 Single Stage Heat/Cool

5-2 Day Programmable

Features

- Dual Powered- Hardwired or Battery
- 5-2 Day Separate Weekday/ Weekend Programming
- Large Display with Bright Blue Backlight
- Adjustable Temperature Set Point Limits
- Non-Volatile Memory Retains User Settings
- Filter Check Monitor
- Adaptive Recovery Mode (ARM™)
- Adjustable Temperature Differential
- Compressor Short Cycle Protection
- ESD Guard™ Electronic Circuitry
- Separate Heating and Cooling Set Point Program
- Times and Temperatures
- Temporary Program Override for 4 Hours or
- Until Next Set Point
- Programmable Extended Hold Mode
- Front Access Reset Button
- F°/ C° Switch
- Gas/ Electric Fan Switch
- Mount to Horizontal Box
- Easy Access Front Battery Door
- Separate O & B Terminals
- Meets California Title 24 Guidelines



TT-N-421

Multi-Stage 2 Heat/ 1 Cool Conventional or Heat Pump Thermostat

Non-Programmable

Features

- Dual Powered- Hardwired or Battery
- Large Display with Bright Blue Backlight
- Adjustable Temperature Set Point Limits
- Non-Volatile Memory Retains User Settings
- Easy Acces Front Battery Door
- Separate O & B Terminals
- Compressor Short Cycle Protection
- ESD Guard™ Electronic Circuitry
- · Adjustable 1st and 2nd Stage
- Temperature Differential
- Auxiliary Heat Indicator
- ESD Guard™ Electronic Circuitry
- · Front Access Reset Button
- F°/ C° Switch
- Mount to Horizontal Box
- Separate Heating and Cooling
- Set Point Temperatures



Honeywell Thermostats

Including the latest RedLINK™ Wireless-Enabled Products







- · Dramatically cut installation time with Honeywell wireless technology
- · Quickly and easily relocate a thermostat without running wires
- Upgrade to Multi-Stage Equipment or add Cooling without running wires
- · Display Outdoor Temperature and Humidity with a Wireless Outdoor Sensor
- · Offer Temperature Control On-Demand with Personal Comfort Control



CHEMICALS AND LUBRICANTS

ONE GALLON		
PRODUCT #	DESCRIPTION	
TT-8-G	TOP-KLEEN GREEN NO RISE	
TT-8-P	TOP-PRO BLUE NON ACID; SUPER FOAMING	
TT-8-R+	TOP-PRO RED NON-ACID; CLEANER	
TT-SCM-720-01	TOP-SUPER BRITE BROWN; FOAMING CLEANER	





TopTech	TT-720-01	TT-8-G	TT-8-P	TT-8-Y	TT-8-R+
Product Name	Top-Brite	Top-Kleen	Blue Power	Top-Foam	Red Foaming
				35-30-4 - 30-00 - 3	
Nu-Calgon	4819-08	4168-08	4291-08		
Product Name	Alka-Brite	Evap Pow'r	Nu-Brite		
	10.				50 M
Virginia KMP	FM-1	AK-1	AKF-1		
Product Name	Foam-Max	Acti-Kleen	Alki-Foam		
		94	## ## ## ## ## ## ## ## ## ## ## ## ##		25
Ace	FNC-1	CCL-1	ACC-1	HDC-1	
Product Name	Foam N Clean (FMC)	Evap Kleen	Alkaline Coil Cleaner	Ace Klean HD	
	e.		CE PL		5%
Vapco	FM-1	HP-1	PL-1		
Product Name	Foaminator	HP Cleaner	Plus		
		33 7	3		Dia Control
Rectorseal	82310	82555	89555		
Product Name	Aluminate	Conc. Evap. Coil Cl	Alkaline E S Cond Coil		
	-		- No.		-71
Stewart Hall	82636	82612	82644		
Product Name	Foam-A-Coil	Coil-Rite	Renewz		
	Y		7F		
Hydrobalance			Black Max Conc.		
Totaline		P902-1001	P902-0101		P902-0101A
		Contract of the Contract of th	Condenser Cleaner Non-		P902-0101A
Product Name		Coil Cleaner Concentrate	Acid Concentrate		Total Bright



CHEMICALS AND LUBRICANTS



220 POLYOLESTER COMPRESSOR OIL		
PRODUCT #	DESCRIPTION	
TT-POE220-GAL	COMPRESSOR POLYOLESTER;OIL ISO 220 - 1 GAL	
TT-POE220-GAL5	COMPRESSOR POLYOLESTER;OIL ISO 220 - 5 GAL	



POLYOLESTER COMPRESSOR OIL		
PRODUCT #	DESCRIPTION	
TT-POE68-GAL	COMPRESSOR POLYOLESTER;OIL ISO 68 - 1 GAL	
TT-POE68-QT	COMPRESSOR POLYOLESTER;OIL ISO 68 - 1 QT	



POLYOLESTER COMPRESSOR OIL		
PRODUCT #	DESCRIPTION	
TT-POE32-GAL	COMPRESSOR POLYOLESTER;OIL ISO 32 - 1 GAL	
TT-POE32-QT	COMPRESSOR POLYOLESTER;OIL ISO 32 - 1 QT	



	MINERAL COMPRESSOR OIL
PRODUCT #	DESCRIPTION
TT-MINOIL3-GAL	MINERAL COMPRESSOR;OIL ISO 32 - 1 GAL
TT-MINOIL4-GAL	MINERAL COMPRESSOR;OIL ISO 68 - 1 GAL



VACUUM PUMP OIL		
PRODUCT #	DESCRIPTION	
TT-VACOIL-GAL	VACUUM PUMP;OIL HIGH VISCOSITY - 1 GAL	
TT-VACOIL-QT	VACUUM PUMP;OIL HIGH VISCOSITY - 1 QT	









- · Air cleaner attaches to any forced air heating or cooling system
- Incredible standard MERV 11 filtration rate
- · Maintain high efficiency levels of your HVAC Equipment
- · Help protect your family and home from airborne particulates, allergens, dust, and dander
- · Cleans the air in your entire home every time your heating or cooling system is on
- Easy filter cartridge replacement lasts up to 12 months*

To complete and optimize your indoor air quality, consider adding the Toplech Whole House UV Air Treatment System.



^{*} Filter life varies based on equipment runtime and lifestyle conditions.

WHOLE HOUSE AIR TREATMENT



Why UV Treatment

- Fragile immune systems (Children/Seniors)
- Allergies
- · Respiratory complications
- High humidity regions
- Energy efficiency of HVAC equipment
- · Fights mold and bacteria growth
- Affordable
- · Designed for any residential system

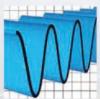




Effective. UV-C light neutralizes the microbe by penetrating its cell walls and severing the bonds of its DNA.



Works 24/7.
Operates continually all year round disinfecting cooling coils, drain pans, and air duct surfaces.



Science. Optimized to produce light at a wavelength of 254 nanometers. Proven to be most effective for microbial control.



Antibacterial.
Independently
laboratory tested
and proven to reduce
airborne and surface
bacteria.



Low Maintenance.
The only maintenance required is the annual replacement of the bulb.

TopTech recommends adding high efficiency filtration to your system to optimize and enhance your indoor air quality. Consider our **TechPure** air cleaners.



Ask about MERV 11 TechPure air cleaners.









- 2-wire 24V electronic power supply
- Extended range ballast (19V 34V)
- 3000V surge protection
- 14" lamp length
- Protective filter shield included
- Water-resistant connections
- Extra long lamp cord (6 ft)
- Patented flange for delta plate installations
- Suitable for up to 5 ton (2000CFM) systems
- Average bulb life 9000 hours (Peak performance)

FILTER SHIELD INCLUDED



Filter shield deflects UV light away from UVsensitive filter material and focuses UV light where its needed most.

HD ELECTRICAL RANGE



Energy efficient, low voltage, electronic ballast operates on only 24 volts and is moisture sealed for HVAC applications.

MOISTURE RESISTANCE



Protective, clear lamp boot makes lamp replacement easy while providing protection against moisture.

SCREWLESS INSTALL



Custom magnetic bracket uses a powerful magnet to securely hold the bracket to the surface. No drilling required.

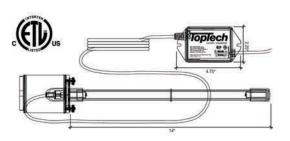
VARIETY OF INSTALLATION METHODS



Custom lamp flange allows lamp to be installed directly in A-coil delta plate for optimal UV exposure.



Custom bracket, using magnet or screws, allows unlimited placement of lamp near cooling coil or surface.



©2010 Carrier Enterprise • www.carrierenterprise.com TT-UV24V1 2/10 2/04/10 11:21am

Specifications:

Dimensions: 24V: 4.75"L x 2.25"W x 2"H.

Bracket: 3.5"L x 2.25"W x 3.5"H. Power: 24V, 50/60Hz. Amps: 14" Lamp - 1.1A.

Weight: Less than 2 lbs.

Lamp Life: 9000 hours continuous operation. Warranty: 5-yr limited. 1-year bulb.

Specifications subject to change without notice

U.S. Patent Nos. 5,334,347, 5,817,276, 6,245,293, 6,267,924, 6,280,686, 6,313,470, 6,627,000, 6,539,727, 6,932,494, 6,550,257



Ask about MERV 11 TechPure air cleaners.



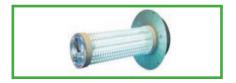
MECHANICAL AIR CLEANER		
PRODUCT #	DESCRIPTION	
TT-MAC-1625	16X25 FURNACE MERV 11	
TT-MAC-1722	17X22 AIR HANDLER MERV 11	
TT-MAC-2020	20X20 FURNACE MERV 11	
TT-MAC-2025	20X25 FURNACE MERV 11	
TT-MAC-2122	21X22 AIR HANDLER MERV 11	
TT-MAC-2522	25X22 AIR HANDLER MERV 11	



	UV LIGHTS
PRODUCT #	DESCRIPTION
TT-UV24-14	24 VOLT UV LIGHT - WITH FILTER SHIELD



DUCT AIR PURIFIER		
PRODUCT #	DESCRIPTION	
TT-AK249	24V 9" LENGTH	
TT-AK245	24V 5" LENGTH	
TT-AK24-R	24V 9" LENGTH W/ REME TECHNOLOGY	



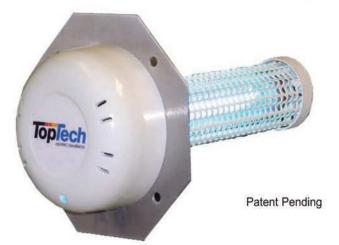




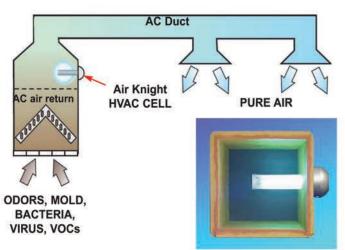


Toplech Air Knight Air Purification System

A Photohydroionization™ (PHI) Technology



The Air Knight is designed to eliminate sick building syndrome risks by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses*. The Air Knight Cells are easily mounted into air conditioning and heating systems air ducts where most sick building problems start. When the HVAC system is in operation the Air Knight Cell creates an Advanced Oxidation Process consisting of: Hydro-peroxides, super oxide ions and hydroxide ions. All are friendly oxidizers. By friendly oxidizers we mean oxidizers that revert back to oxygen and hydrogen after the oxidation of the pollutant.





Actual lab tests showing up to 97% reductions of airborne bacteria and mold



The combination of UV light enhanced by a hydrated quad-metallic compound target develops an advanced oxidationplasma. This process also produces hydro-peroxides, super oxide ions and hydroxides. By engineering the proper UV light wavelength, in combination with a triple function, no maintenance unit, The PHI Cell provides safe hydro-peroxides, super oxide ions and hydroxides to purify the air.

With the Air Knight-PHI Cell Advanced Oxidation System, micro-organisms can be reduced up to 99.99%. Gases, VOCs and odors can also be reduced significantly, and the room will have hydro-peroxides, super oxide ion and hydroxides which will help give your room fresh, clean and odor free air.

Item#	HVAC Air Blower Size	Dimension	Ship Wt.	Replacement Cell
TT-AK249 TT-AK245	1000-6000 CFM 500-2000 CFM	9" probe/ 5.5" Dia. Plate 5" probe/ 5.5" Dia. Plate	3 lbs. 3 lbs.	RGF-PHIC-9GA RGF-PHIC-5GA



PATENT PENDING

INDOOR AIR QUALITY

Air Knight

Cleaner, Fresher **Indoor Air in** 24 Hours

REME

Air Purification System A Photohydroionization™ (PHI) **Technology**

The Air Knight REME is designed to help eliminate sick building syndrome by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses. The Air Knight REME is easily mounted into air conditioning and heating system air ducts where many sick building problems start. When the HVAC system is in operation the Air Knight REME creates an Advanced Oxidation Process consisting of: Hydro-peroxides, super oxide ions and hydroxide ions, all of which are friendly oxidizers that revert back to oxygen and hydrogen after the oxidation of the pollutant.

REME Technology enhances filtration by charging the particulate in the air forcing dust, dander and allergens to cling together making them easier to capture.

ROOFTOP UNIT



Benefits of Air Knight REME® Technology

With a REME® Generator Advanced Oxidation System, micro-organisms can be reduced by over 99%. Gases, VOCs, odors and particulate (dust) can also be reduced significantly. Charged Advanced Oxidation Plasma will be carried throughout the conditioned space for a continuous purification process and a quick cleansing of introduced odors and microbials.

Item #	HVAC Air Blower Size	Dimensions	Ship Wt.	Replacement Cell
TT-AK24-R	1,000 to 6,500 CFM	14" probe / 5.5 Dia." plate	3 lbs.	TT-REME

2 year warranty on parts





CHARGED IONS

Learn more with your smartphone Click the QR code with your phone for fast access to more information.



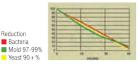




Mold/Yeast

The purpose of this test was to evaluate the effect the RGF AOT unit has on mold/yeast bacteria (TPC). This test was performed utilizing a standard 2000 sq. ft. home and 3000 sq. ft. simulated home

Tested by California Microbiology Center Independent Accredited Lab - IBR Kansas State University University of Florida United States Air Force R&D Labs C&W Engineering University of Cincinnati Kane Regional Hospital



Norwalk Virus

Noroviruses are a group of related, single-stranded RNA, nonenveloped viruses that cause acute gastroenteritis in humans. Noroviruses are named after the original strain "Norwalk virus," which caused an outbreak of gastroenteritis in a school in Norwalk, Ohio, in 1968. No evidence suggests that infection occurs through the respiratory system. Noroviruses are highly contagious and as few as 10 viral particles may be sufficient to infect an individual. During outbreaks of norovirus, several modes of transmission have been documented; for example, initial foodborne transmission in a restaurant, followed by secondary person-to-person

Reduction

transmission to household contacts. 50% of all foodborne outbreaks of gastroenteritis can be attributed to noroviruses. Among the 232 outbreaks on norovirus illness reported to CDC from 1997 to 2000, 36% were in restaurants, 23% were in nursing homes, 13% were in schools and 10% were vacation settings



SOURCE: CDC-CENTERS FOR DISEASE CONTROL AND PREVENTION TESTED BY MIDWEST RESEARCH INSTUTUED INACTIVATION RATE 99+%

Formaldehyde

The purpose of this test was to evaluatre the effect the RGT AOT unit has on formaldehyde in a home. Tests were conducted in actual mobile homes for



H1N1 (Swine Flu)

to bond together, thereby enabling the existing filtration to be more effective.

Kansas State University has completed preliminary testing on RGF's Photohydroionization (PHI-Cell*) and Reflective Electromagnetic Energy (REME* Cell) technologies with 99+ inactivation of H1N1) Swine Flu on a stainless steel surface. Further tests are scheduled. 2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide. On June 11, 2009,

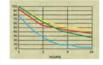
the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway. Spread of 2009 H1N1 virus is thought to occcur in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with infuenza. Sometimes people may become infected by touching items - such as a surface or object - with flu viruses on it and then touching their mouth



TESTED BY KANSAS STATE UNIVERSITY INACTIVATION RATE 99+%

Odors

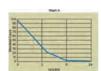
The purpose of this test was to evaluate to what effect the RGF's AOT unit has on cleaning chemicals, pet odors, smoke and perfume odors. This test was performed utilizing two 500 cubic foot test chambers and a ten-person odor panel. The qualitative assessments of the ten-person odor panel were then used as a means to determine the odor reduction. TESTED BY C&W ENGINEERING (INDEPENDENT PE FIRM)



Cleaning chemicals 55+% ■ Pet odors 72% ■ Perfume odors 63+% ■ Smoke odors 70%

Methicillin Resistant Staphylococcus aureus

Methicillin-resistent Staphylococcus aureus (MRSA) is a type of bacteria that is resistant to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nurinsg homes and dialysis centers) who have weakened immune systems. SOURCE: CDC CENTERS FOR DISEASE CONTROL AND PREVENTION. TESTED BY KANSAS STATE UNIVERSITY INACTIVATION RATE 99+%





Air Knight REME's Advanced Photo-Hydro-Ionization Technology provided and built by RGF Environmental Group, Inc.





REFRIGERANT RECOVERY UNIT

PRODUCT # DESCRIPTION

TT-MM1

MIN-MAX RECVRY UNIT

- Compact Size Maximum Performance
- Proprietary "Oil-less" Compressor
- Capable Of Handling Liquid Or Vapor
- Recovers All Commonly Used CFC, HFC, HCFC Refrigerants Including R410A
- Ergonomic
- Field Serviceable Compressor
- Self Purge Feature
- Includes Filter Drier
- 550 PSI Safety Cut Off Switch
- 28 Lbs
- 11" H X 9" W X 16" D



REFRIGERANT SCALE

PRODUCT

DESCRIPTION

TT-SCALE

REFRIG CHARGING SCALE

Package Includes:

- Slip resistant weighing platform
- Hand Control
- (1) 9V battery
- Heavy duty carrying case
- Weighing Capacity: 220 lbs. (100 Kg.)
- Accuracy: +/- 0.5%
- Resolution: .25oz. / .01 Kg

Display:

- High Resolution LCD screen with backlight
- Weight 4 lbs. in case





VACUUM PUMPS		
PRODUCT #	DESCRIPTION	
TT-VP2D	2CFM VACUUM PUMP DUAL STAGE	
TT-VP5D	5CFM VACUUM PUMP DUAL STAGE	
TT-VP9D	9CFM VACUUM PUMP DUAL STAGE	



RECOVERY TANKS		
PRODUCT #	DESCRIPTION	
AM-RT30	RECOVERY TANKS 30 lbs	
AM-RT50	RECOVERY TANKS 50 lbs	



INFRARED THERMOMETER		
PRODUCT #	DESCRIPTION	
TT-IT8750	INFRARED THERMOMETER 1 2/1 TD8750	



NITROGEN REGULATOR		
PRODUCT #	DESCRIPTION	
TT-NREG	NITROGEN REGULATOR DELIVERY	
	PRESSURE 0-400 PSIG	













MANIFOLD GAUGE SET		
PRODUCT #	DESCRIPTION	
TT-2VM5H	2VLV MNFLD W/5 FT HOSES	
TT-LSG	LOW SIDE GAUGE	
TT-HSG	HIGH SIDE GAUGE	

MANIFOLD GAUGE SET

- Metal Handles
- Brass Manifold
- R-22, R-410a, R-404
- 5 Ft. Hoses High Pressure Hoses
- Rubber Gauge Covers

REPLACEMENT GAUGES		
PRODUCT #	DESCRIPTION	
TT-HLSG	3 1/8" NPF™ GAUGE	

- GAUGES AND HOSES
- R-410A/R-22/R-404A/ R134a
- HIGH SIDE PSI °F
- No Pointer Flutter®
- Includes Gauge Boots

REPLACEMENT GAUGES		
PRODUCT #	DESCRIPTION	
TT-LSGL	3 1/8" NPF™ GAUGE	

GAUSES AND HOSES

- R-410A/R-22/R-404A/ R134a
- LOW SIDE PSI °F
- No Pointer Flutter®
- Includes Gauge Boots

REPLACEMENT GAUGES	
PRODUCT #	DESCRIPTION
TT-HSG	2.5" LPF™ GAUGE

GAUSES AND HOSES

- R-410A/R-22/R-404A
- HIGH SIDE PSI °F
- Pulsation Dampener
- Includes Gauge Boots

REPLACEMENT GAUGES	
PRODUCT #	DESCRIPTION
TT-LSG	2.5" LPF™ GAUGE

GAUSES AND HOSES

- R-410A/R-22/R-404A
- LOW SIDE PSI °F
- Pulsation Dampener
- Includes Gauge Boots





HEAVY DUTY HOSES		
PRODUCT #	DESCRIPTION	
TT-5HRSET	5 Ft. Hose Set (R,Y,B)	
TT-5HR	5 Ft. Hose (Red)	
TT-5HY	5 Ft. Hose (Yellow)	
TT-5HB	5 Ft. Hose (Blue)	



6" BALL VALVE ENDS		
PRODUCT #	DESCRIPTION	
TT-BVSET	6" Ball Valve Ext Set	
TT-5HR	6" Ball Valve Ext Red	
TT-5HY	6" Ball Valve Ext Blue	
TT-5HB	6" Ball Valve Ext Yellow	

CHARGING AND VACUUM HOSES

Maximun Working Pressure: 800 PSI

Burst Pressure: 4000 PSI



LEAK DETECTOR	
PRODUCT #	DESCRIPTION
TT-LD	REFRIG LEAK DETECTOR
TT-LD400	REFRIGERANT GAS LEAK DETECTOR
TT-LDS	LEAK DETECTOR REPLACE SENSOR
	FOR TT-LD





PRESSURED FLUSH GUN KIT	
PRODUCT #	DESCRIPTION
TT-PFGK	PRESSURED FLUSH GUN KIT



WELDING TORCH KIT	
PRODUCT #	DESCRIPTION
TT-100	WELDING TORCH KIT

OXYACETXLENE WELDING TORCH

Brazing Outfit w/ gauge Boots plastic carrying stand



TANKS	
PRODUCT #	DESCRIPTION
TT-R	EMPTY OXYGEN TANKS 20 CC
TT-MC	EMPTY ACETYLENE TANK 20 CC









HO-BTS-8068B











TORCHES		
PRODUCT #	DESCRIPTION	
HO-BTS-8089B	HANDHELD BRAZING TORCH	
HO-BTS-8068B	SWIVEL BRAZING TORCH	
HO-HZ-8386	W/AP209B/AP345 HOSED BRAZING TORCH	
HO-HZ-8386	W/AP209B/AP345 HOSED BRAZING TORCH	
HO-BTM-7010	PENCIL FLAME TORCH	

HAND TORCH CYLINDER				
SPECIFICATIONS	MAP-Pro™			
DIMENSIONS (IN.)	2.94" X 10.64"			
GAS CAPACITY (OUNCES)	14.1			
FILLED CYLINDER WEIGHT (LBS.)	1.9			

UNITS PER CASE	12
CASES PER LAYER	9
LAYERS PER PALLET	10
UNITS PER PALLET	1,080
PALLET PER LOAD	21
UNITS PER LOAD	22,680
PALLET WEIGHT (LBS.)	2,145
PALLET DIMENSIOND (IN.)	48" x 40" x 65"
CARTON DIMENSIONS (IN.)	18" x 6" x 11"

CONDENSATE PUMPS			
PRODUCT #	DESCRIPTION		
TT-CP-20T	WITH TUBE, 20' LIFT 115 VOLT		
TT-CP20-30T	SC-MINI FLOWATCH 2		
CONDENSATE PUMPS			

- 20 ft. Lift Condensate Pump with Tubing
- 115 volt or 230
- 4 Water Ports
- Alarm contacts

Sauermann®



TECHNICAL CHARACTERISTICS	SI 1805	SI 1820		
Max flow rate				
Max discharge head	 16 ft			
Max pressure head (shut off)	20 ft			
Electric power	90 W			
Electric voltage	120V~ 60 Hz* or 230V ~ 50/60 Hz**			
Alarm contact	NC 4 A resistive - 250 V			
Thermal protection (overheating)	266°F			
Condensate temperature and acidity	176°F, pH > 3.4			
Detection	integrated			
Detection levels	On= 1 1/4" Off= 1"	On= 2", Off= 1 15/32",		
		Alarm=2 31/32"		
Sound level at 3.3 ft ***	47 dBA			
Safety standards	UL / CSA certified by Intertek Canada			
RoHS and WEEE european directive	RoHS and WEEE european directives complies			

 Ref. Sauermanßl 1805
 SI1805SIUS11* or SI1805SIUS23**

 Ref. Sauermann SI 1820
 SI1820SIUS11* or SI1820SIUS23**
 Length

S	I 1820 Pump unit	7 3/4"	5″	6 3/4"	0.53 gal	
	RECOMMENDE			and plugs, po with electrica 6.5 ft, alarm v	rated check valve, 2 scr ower cable : 3 core cabl al plug (120 V or 230 V), wires: 3 1/2*, 2 wires (NC t rubber adapter Ø 1".	e

Width

MANUFACTURER'S 2 YEAR WARRANTY *** Noise level in application, measured in Sauermann acoustic lab, pump operating with

Tank

0.13 gal

Height

4 13/16"

HEATING

AIR CONDITIONING

REFRIGERATION

GAS FURNACES

GAS CONDENSING BOILERS

COLUMN AIR CONDITIONING UNITS

MULTI-CASSETTES

DUCTED UNITS

REFRIGERATED DISPLAY / COLD STORE CABINETS

EVAPORATORS

DEHUMIDIFIERS

SUITABLE FOR HIGH **TEMPERATURES AND ACID CONDENSATES**

One-piece centrifugal pumps (132 gph), suitable for lifting charged, high temperature (176°F) and acid condensates from gas condensing boilers, air conditioning and refrigeration units.

ADVANTAGES

High discharge head

Compact

High flow rate

Thermal protection (overheating) 266°F Integrated check valve

RECOMMENDED ACCESSORIES



ACC 00225: for pipe outside Ø 1" ACC 00230: for pipe outside Ø 1 1/4" ACC 00240: for pipe outside Ø 1 1/2"



ACC 00801:Ø 3/8"



ACC 00125: clear tubing inner Ø 3/8", 82 ft ACC 00120: clear tubing inner Ø 3/8", 20 ft

Dimensions

SI 1805 Pump unit





SOLID CORE REFRIGERANT DRIERS

CONDENSATE PUMPS

- Suction Line and Liquid Line Driers
- R410a compatible printed on box and drier
- Hard Drawn Copper Ends
- Solid Core
- XH-11 Desccant



LIQUID LINE BI-FLOW			
PRODUCT # DESCRIPTION			
TT-LLDBF083S	3/8S 8CI		
TT-LLDBF163S	3/8S 16Cl		

LIQUID LINE		
PRODUCT #	DESCRIPTION	
TT-LLD083S	3/8S 8CI	
TT-LLD163S	3/8S 16Cl	

	SUCTION LINE
PRODUCT #	DESCRIPTION
TT-SLD165S	5/8S 16Cl
TT-SLD166S	3/4S 16CI
TT-SLD167S	7/8S 16CI
TT-SLD305S	5/8S 30Cl
TT-SLD306S	3/4S 30CI
TT-SLD307S	7/8S 30Cl
TT-SLD309S	11/8 30Cl



	SIGHT GLASS
PRODUCT #	DESCRIPTION
TT-SG38	3/8'" SIGHT GLASS

SIGHT GLASS

Moisture Indicator

- Use with R-410A, R-22, R-22, R-502, R-12 Systems
- Solid Copper Fittings
- Brass Body















	HAND TOOLS
PRODUCT #	DESCRIPTION
TT-BMKNF0610	DUCT KNIFE
TT-MFS	STEEL FIN STRAIGHTENER
TT-TC127	MINI CUTTER 1/8-5/8IN OD
TT-FS6	6-IN-1 FIN STRAIGHTENER
TT-TIM1	1-1/4IN TELESCOPIC INSPECT MIRROR
TT-TIM2	1X2IN TELESCOPIC INSPECT MIRROR
TT-TIM3	2IN TELESCOPIC INSPECT MIRROR
TT-TIM4	2X3-1/2IN TELESCOPIC INSPECT MIRROR
TT-TC274	HVY DTY CUTTER 1/8 TO 1-1/8 OD TUBING
TT-TC312	HVY DTY CUTTER 1/4 TO 1-5/8 OD TUBING
TT-FT195	HVY DTY 45IN FLARING TOOL
TT-TERMKIT/TOOL	TERMKIT 180PC W/TOOL T
TT-TK275	TUBING TOOLS KIT TOPTECH
TT-MTWS	TORQUE WRENCHES 17-22-24-26-27- 29MM T
TT-FT808A	ECCENTRIC CONE TYPE FLARING TOOLS TT VARIOUS
TT-TBK	7-IN-1 MULTI BENDER KIT
TT-TE6H	TUBING EXPANDER TOOL



















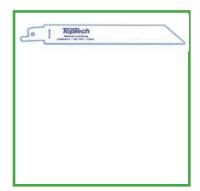


	RATCHET WRENCH
PRODUCT #	DESCRIPTION
TT-70022	REVERSIBLE. RATCHET WRENCH

FITS 1/4" AND 3/16" SQUARE ON ONE END; 3/8" AND 5/16" ON THE OTHER.



	RATCHET CUTTER
PRODUCT #	DESCRIPTION
TT-70078	PVC RATCHET CUTTER 1-5/



BLADES		
PRODUCT #	DESCRIPTION	
TT-156	RECIP BLD 12"X6TP	
TT-614	RECIP BLD 6"X14T	
TT-618	RECIP BLD 6"X18TPI	
TT-624	RECIP BLD 6"X24T	
TT-636	RECP BLD 6"X6TPI	
TT-656	RECIP BLD 6"X6TPI	



MAGNETIC DRILL CHUCKS		
PRODUCT #	DESCRIPTION	
TT-MSH1/4MC	1/4" MAGNETIC DR	
TT-MSH5/16MC	5/16 MGNTC DRILL	





Each Package of TopTech Condensing Unit Tie Down Clips include a photocopy of the certified signed and stamped engineered drawings to submit with permits. TopTech Condensing Unit Tie Down Clips are designed to be in compliance with Florida Building Code 2007 edition with 2009 amendments and ASCE 7-05 chapter 6. The TopTech Condensing Unit Tie Down Clips are made from 14 gauge double hot dipped galvanized steel with a thickness of .0785" minimum. Clip #TT-BMTD062 is 12 gauge double hot dipped galvanized steel with a thickness of .115 minimum.





DUAL HEX WRENCH ADAPTER KEY		
PRODUCT #	DESCRIPTION	
TT-DHW316	DUAL HEX WRENCH ADAPTOR	



FLAT WASHERS		
PRODUCT #	DESCRIPTION	
TT-3/8FLW	3/8" X 1" WASHER	



	HEX HUTS	
PRODUCT #	DESCRIPTION	
TT-3/8HN	3/8" HEX NUT (EA)	



THREADED COUPLINGS				
PRODUCT #	DESCRIPTION			
TT-3/8TC	3/8" ROD CPLG			



TOWELS					
PRODUCT #	DESCRIPTION				
TT-TOWEL-ROLL	TOWELS 20PC ROLL				
TT-TOWEL-SHOPCLR	SHOP TOWELS COLOR ASORTMENT				
TT-TOWEL-SHOPWHT	SHOP TOWELS ALL WHITE				
TT-TOWEL-SURG	SURGICAL TOWEL 5 LB 40PC BOX				





PLASTIC ANCHORS KITS					
PRODUCT #	DESCRIPTION				
TT-AK1/4HW100	ANCHOR SCREW KIT				
TT-AK3/16HW100	ANCHOR KIT				
TT-AK5/16HW50	ANCHOR SCREW KIT				



WIRE NUTS (100 per Pkg.)				
PRODUCT #	DESCRIPTION			
TT-WNB	BLUE WIRE NUTS			
TT-WNO	ORANGE WIRE NUTS			
TT-WNR	RED WIRE NUTS			
TT-WNY	YELLOW WIRE NUTS			
TT-WWNB	WING BLUE WIRE NUTS			



DUCT STRAP				
PRODUCT #	DESCRIPTION			
TT-36NSTRAP	36 IN DUCT STRAP NATURAL – 50/Pkg			
TT-48NSTRAP	48 IN DUCT STRAP NATURAL – 50/Pkg			



WEBBING					
PRODUCT #	DESCRIPTION				
TT-WEBBINGSTRAP	BLACK 2" WEBBING STRAP				
TT-WEBBINGSTRAP/UL	WEBBING STRAP UL PRINTED				





HOSE CLAMPS				
PRODUCT #	DESCRIPTION			
TT-HOSECLAMPS	HOSE CLAMP ASSOR TMENT 30PC			



BRUSHES				
PRODUCT #	DESCRIPTION			
TT-B2	2" CHIP BRUSH			
TT-B21/2	21/2" CHIP BRUSH			
TT-B3	3" CHIP BRUSH			



	CABLE TIES
PRODUCT #	DESCRIPTION
TT-CABLETIE11B	CABLETIE 11 IN 100PC BLK
TT-CABLETIE11N	CABLETIE 11 IN 100PC NAT
TT-CABLETIE14B	CABLETIE 14 IN 100PC BLK
TT-CABLETIE14N	CABLETIE 14 IN 100PC NAT
TT-CABLETIE24B	CABLETIE 24 IN 500PC BLK
TT-CABLETIE24N	CABLETIE 24 IN 50PC NAT
TT-CABLETIE7B	CABLETIE 7 IN 100PC BLK
TT-CABLETIE7N	CABLETIE 7 IN 100PC NAT
TT-CABLETIEMOUNT11B	CABLETIE MOUNT 1.1 IN 25PC BLK
TT-CABLETIEMOUNT11N	CABLETIE MOUNT 1.1 IN 25PC NAT
TT-CABLETIETOOLHD	CABLETIE TOOL/ HEAVY DUTY 175LB
TT-CABLETIETUBE/TOOL	CABLETIE TUBE ASST CLR W/TOOL
TT-CABLETIETUBE600B	CABLETIE TUBE 600PC BLACK
TT-CABLETIETUBE600N	CABLETIE TUBE 600PC NATURAL
TT-CABLETIETUBE650B	CABLETIE TUBE 650PC BLACK
TT-CABLETIETUBE650N	CABLETIE TUBE 650PC NATURAL

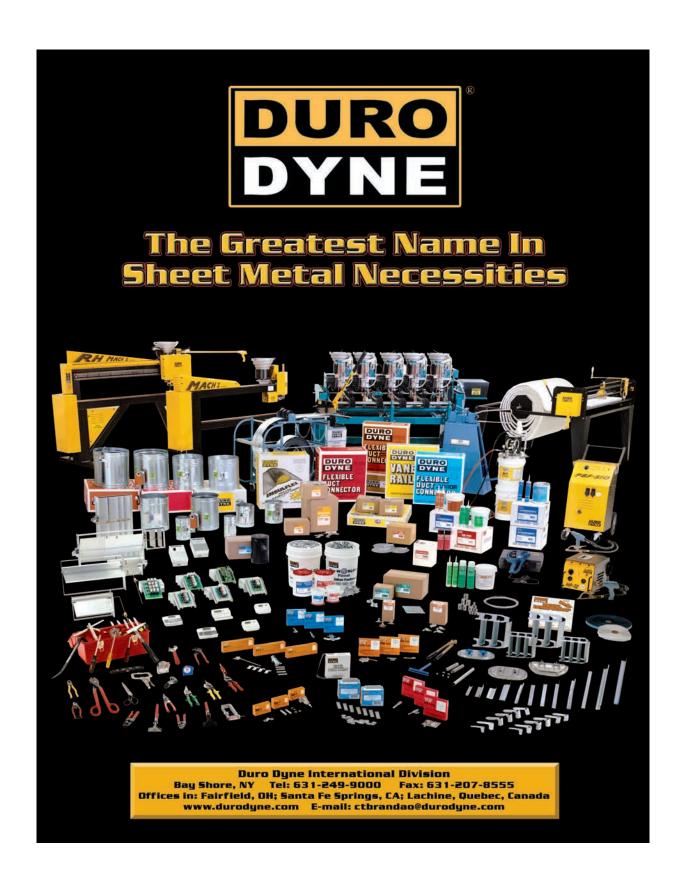




THERMOSTAT GUARDS				
PRODUCT #	DESCRIPTION			
DT-585-TG	THERMOSTAT GUARD-CLEAR PLASTIC 8-1/4"X4-1/2" X 3-1/4"			
DT-585-TG1	THERMOSTAT GUARD-CLEAR PLASTIC 5-3/4"X3-1/2"X2-3/4"			
DT-585-TGZ	THERMOSTAT GUARD-CLEAR PLASTIC 4-3/4"X4-1/4"X2-3/4"			

CROSS REFERENCE						
DIVERSITECH	BEKOPATNO	MARSPAFNO				
585-TG	BTG-UKZ	70220				
585-TG1	BTG-RK	70210				
585-TG2	BTG-K	70205				







東元迴轉式冷媒壓縮機 ROTARY COMPRESSOR



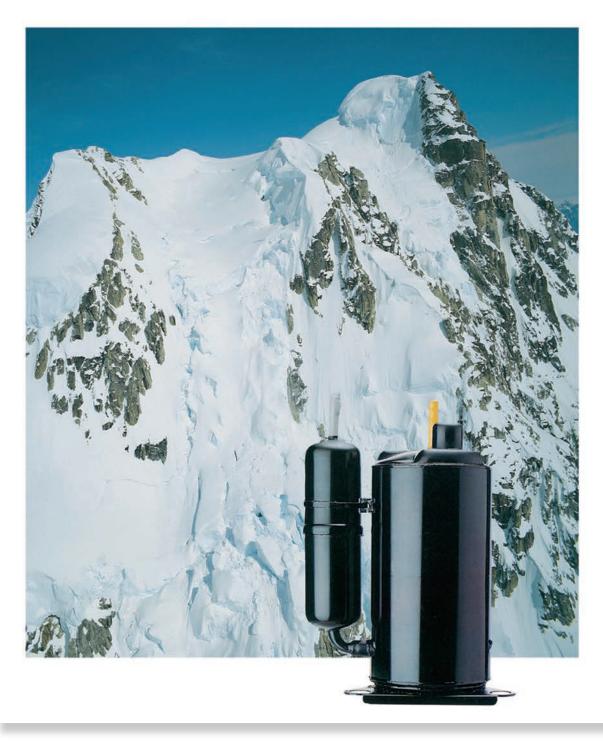












100% MADE IN THE USA



Bristol Compressors International Inc.

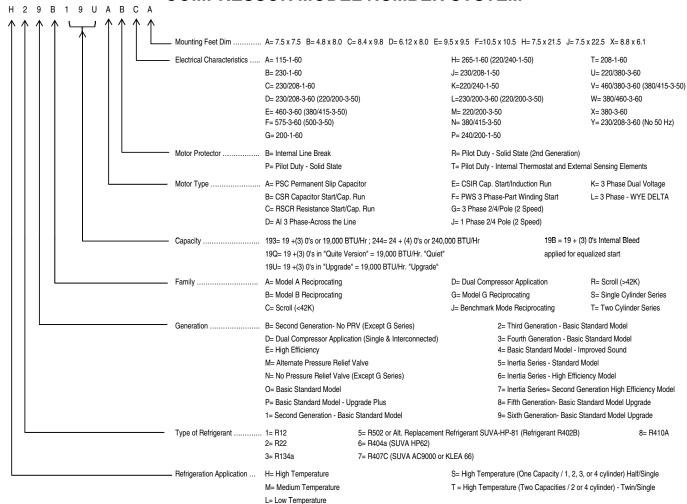
Bristol is the Only Compressor Company Whose Products are 100% Built in the USA.

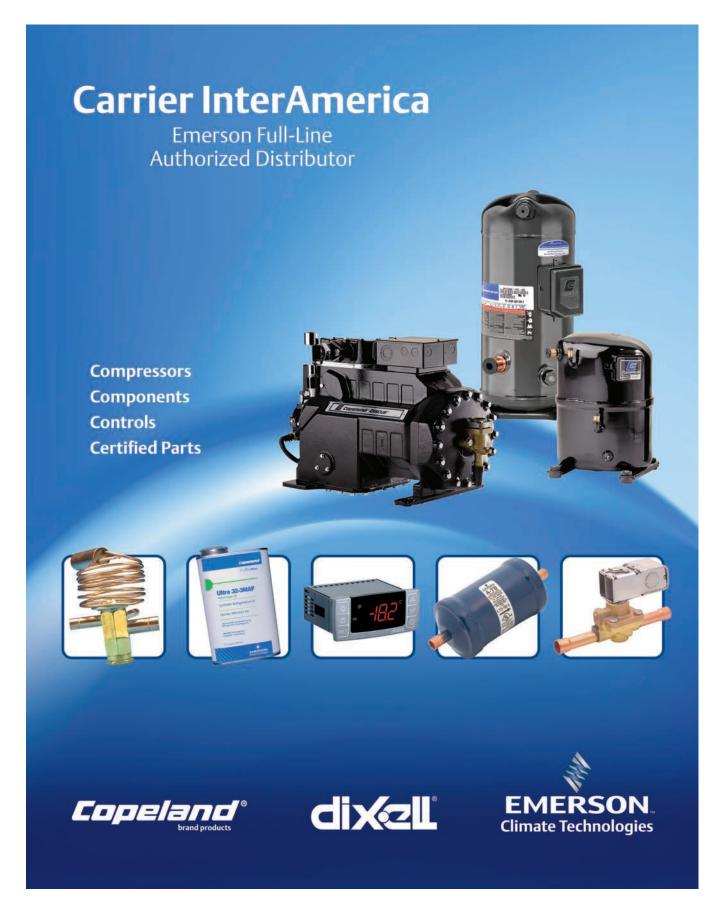


The Most Efficient Refrigeration Product in its Class.

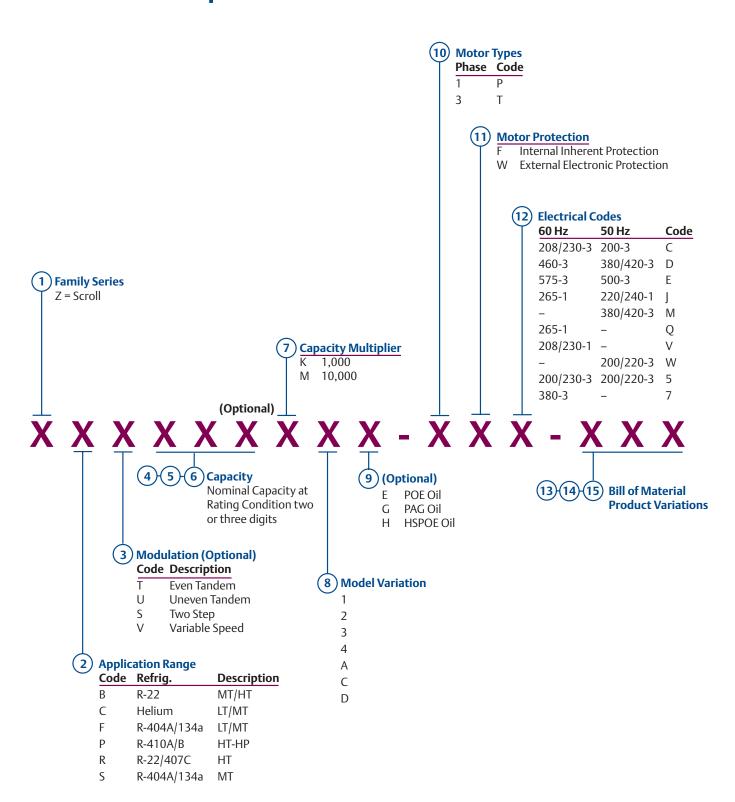
www.bristolcompressors.com

COMPRESSOR MODEL NUMBER SYSTEM





Copeland Scroll™ Nomenclature





New Danfoss Scroll or Reciprocating compressors



Advantages new MLZ Scroll compressors:

- + Lighter and smaller footprint compared to other alternatives
- + Unique disc check valve ensuring quiet, vibration-free operation
- + Including sight glass
- + Combination of energy-efficient motor and a scroll wrap optimized for refrigeration applications

REFRIGERATION & AIR CONDITIONING DIVISION

COMPRESSORS



Nomenclature

Danfoss Scroll compressor model numbers have significance as indicated below:

	Type	Size	Motor	Features					
	HRH	036	U1L	P6					
Application H: high temperature air conditioning				Other	features	Oil sight glass	Oil equalization	Oil drain	LP gauge port
E: with economizer					5	None Thread	None Rotolock	None NPT	Schrader Schrader
Family					6	None	None	None	None
D: residential scroll					7	Thread	None	None	None
C: light commercial scroll	,,,,,,				8	None	Brazed	None	None
R: residential scroll (new platfo L: light commercial scroll (new platform)	orm)				-	trical conne			
Refrigerant and lubricant — M: R-22, mineral or alkylbenzer P: R-407C, POE lubricant	ne oil					ections, scre nections, scr	w terminals ew terminals		
H: R-410A, POE lubricant J: R-410A, PVE lubricant					r protection ternal moto	on or protectior	1		
Nominal capacity In thousands of Btu/h @ 60Hz, ARI conditions				1: 20 2: 20	r voltage (8-230 V 1 8-230 V 3	~ 60 Hz ~ 60 Hz			
Model variation T: design optimized for 7.2/54. U: design optimized for 7.2/37.8				5 : 22 7 : 50	0-240 V 1	~ 50 Hz and 0 Hz and 575	I 460 V 3~ 6 I 265 V 1~ 6 I V 3~ 60 Hz	0 Hz	

Voltage

Voltage Codes	Copeland	Danfoss	
208-230V/1~/60Hz	PFV	1	
208-230V/3~/60Hz	TFC or TF5	2	
380V/3~/60Hz & 460V/3~/60Hz	TFD	4	

Note on SEER ratings:

The Scroll Tech compressors have motors optimized for the different SEER ratings.
Use motor variation «U» for 13 SEER applications and «T»

for 10 SEER



Danfoss Inc., Refrigeration & Air Conditioning Division, 7941 Corporate Drive, Baltimore, MD 21236 Tel. 1-888-Danfoss, Fax 410-931-8256, www.danfoss.com/North_America

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed.

All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

USCO.PB.012.A1.22 Produced by Danfoss USCO.02-2007

COMPRESSORS



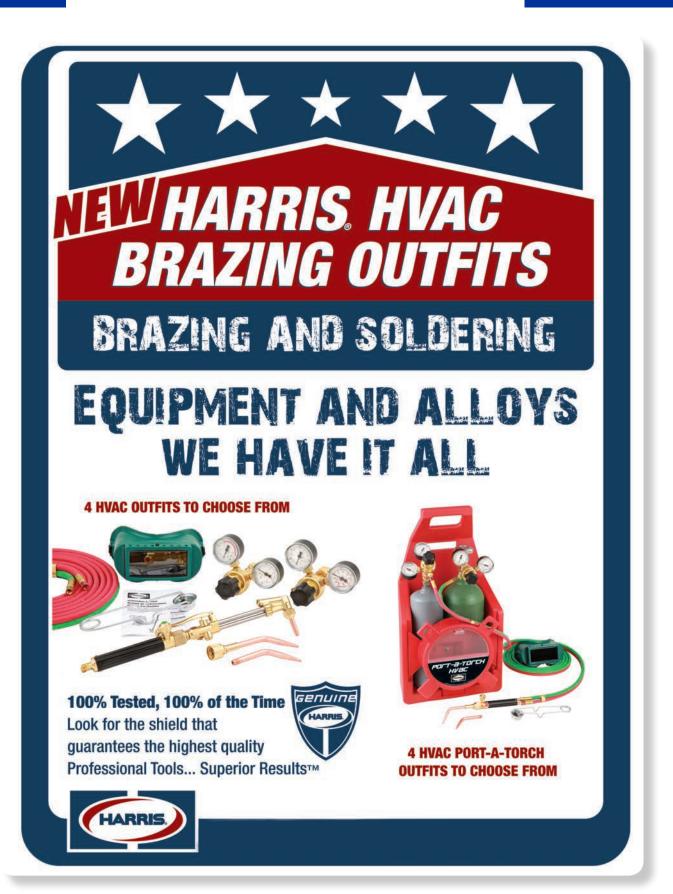
100 East Patterson Tecumseh, MI 49286 www.tcc-nacg.com

MODEL NUMBERS EXAMPLE: Nomenclature Explained

EXAIVIPLE	AMPLE: Nomenciature Explained						
AE	Α	4	4	40	Υ	XA	XC
COMPRESSOR FAMILY	RELEASE VARIANT (GENERATION)	APPLICATION	NUMBER OF DIGITS IN RATED BTU CAPACITY	FIRST TWO DIGITS IN RATED BTU CAPACITY	REFRIGERANT	VOLTAGE	CONDENSING UNITS
AE AG AH AJ AK AV	A = 1st B = 2nd C = 3rd ETC.		In this exam digits, with the or 4,000 BT		PRIMARY REFRIGERANTS A = R12 B = R410A C = R407C E = R22		See Unit Information on Page 2.
AZ PRIMARY APPLICATION PARAMETERS					F = R417a J = R502	VOLTAGE CODES	
HG	EVAP. TEMPERATURE	RATING PT.	MOTOR STARTIN	IG TORQUE	Y = R134a	XA = 115-60-1; 100-50-1 XB = 230-60-1; 200-50-1	
RG RK	1. Low	-10 F	Norma	ı	Z = R404A/ □ R507	XC = 220-240	
TP	2. Low 3. High	-10 F	High	.	□ K307		-60-1; 200-50-1 -60-3; 200-240-50-3
TH	3. High	+45 F +45 F	Tio I			-60-3; 380-420-50-3	
	5. Air Cond.*	+45 F	Norma	ı			3; 480-520-50-3
	6. Medium	+20 F	Normal			XN = 208-230-60-1; 200-220-50-1	
	7. Medium	+20 F	High	.		XP = 220-60-1	; 200-50-1 -60-3; 200-220-50-3
	Air Cond. Commercial	+49 F +20 F	Norma High			XI = 200-230 XU = 100-60-2	,
	Commercial Commercial	+20 F	Norma	ı İ		XV = 265-60-1	'
	A. Medium/Low	+20 F	Norma			AB = 115-60-1	,
	* Application "5" compre	essors, when applied to	units, become applic	ation "4" in			1; 240-220-50-1
L	the units model number					Note: For explain not listed, cont Compressor Co	











Mejorando la Eficiencia de Aire Acondicionado y Calefacción Desde 1965









Linacoustic® RC

Fiber Glass Duct Liner With Reinforced Coating System

Now proven to be #1 overall in shop productivity and jobsite approval.*

* A competitive product comparison study conducted and overseen by FMI, a management consulting firm to the construction industry, rated Linacoustic RC $\sharp 1$ overall by contractors who participated in the study.

specJM.com





Glasfloss Industries is the oldest manufacturer of HVAC filters in the world. Established in 1936. After decades of serving the air filtration industry, Glasfloss has built a worldwide reputation for quality products which provide reliable performance and superior value. Our unique ability to work with customers on special product needs and requests is the result of over 70 years of manufacturing experience and our continuing commitment to research and development.

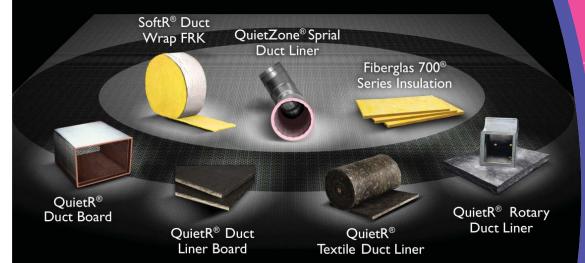
From Disposable Panel Filters to HEPA filters, Glasfloss is the Clear Choice for all of your air filtration needs.



AirGuide has a wide variety of standard products as well as a broad range of custom designed OEM products that can be modified to suit most applications.



MECHANICAL AND AIR HANDLING INSULATIONS



Owens Corning Air Handling products are not only GREENGUARD Indoor Air Quality Certified,® but certified by the even more stringent GREENGUARD Children & Schools® product emission standards.

Owens Corning products continue to be on the cutting edge of green technology and meet the strictest guidelines for indoor air quality.









TRUSTED

PARTNER

FOR ALL

YOUR AIR

HANDLING

SYSTEMS







Selección rápida Controles de refrigeración,

Compresores y Unidades Condensadoras

REFRIGERATION & AIR CONDITIONING DIVISION





invensus

Controls

The brands you trust, the products that perform.



PARAGON

For over 100 years, contractors have trusted Paragon to offer quality defrost control solutions. For maximum versatility, Paragon now delivers multi-voltage defrost controls that are engineered to accommodate a variety of systems and standards. They perform with a level of reliability that outlasts virtually all the competition.

A RANGO

Ranco is a recognized market leader in pressure and temperature controls for universal applications. From fast-food restaurants to supermarkets to convenience stores and vending machines, Ranco products deliver the dependability and the maximum accuracy you demand.

For more information on Invensys Controls and our full product offering, please visit us at www.invensyscontrols.com.

invensus Controls

191 F North Avenue Carol Stream Illinois 60188 USA Invensys TM , Paragon $^{\circ}$, and Ranco $^{\circ}$ are trademarks of Invensys plc., its subsidiaries and/or affiliated companies. All other brands mentioned may be the trademarks of their respective owners.

ww.InvensysControls.com ©2011 Invensys Controls

NOTES

NOTES



Carrier Interamerica Corporation International Parts & Supplies





























TOSHIBA 东芝一直领导着压缩机新潮流 TOSHIBA IS ALWAYS LEADING THE TREND OF COMPRESSOR DEVELOPMENT