

SCOPE OF WORK

	Person	Quantity	Months	Hours	Rate	Total
	<i>Artisan Refrigeration & Air Conditioning</i>	1	36	172		
	<i>Semi-Skilled Labourour</i>	2	36	172		
	<i>Site Supervisor</i>	1	36	172		

Description	Price	Quantity	Total
Copeland Compressor D4 RH1-2500 -Service Exchange		2	
Copeland Compressor D6 RA4-3000 -Service Exchange		2	
Copeland Compressor 4 RE2-2000-Service Exchange		4	
Copeland Compressor 9 RT1-1505-Service Exchange		2	
Copeland Compressor 9 RP2-1010-Service Exchange		2	
Copeland Compressor D6 RH1-3500-Service Exchange		1	
Copeland Compressor D4 RJ1-3000-Service Exchange		2	

Carrier 06EF -299 Compressor		1	
Carrier 06DA 637 Compressor		1	
Compressor SM 090 S4VC Performer Schroll compressor		2	
Maneurop Compressor MTZ80 4AVE		1	
Maneurop Compressor NTZ271A4LR1A		1	
VO2 Suction Valve for Maneurop Compressor NTZ271A4LR1A		1	
VO4 Suction Valve for Maneurop Compressor NTZ271A4LR1A		1	
Crankcase Heater for Maneurop Compressor NTZ271A4LR1A		3	
Eckerle EE600 Condensate pump 230V/50Hz		3	
Valve plate Copeland compressor D4RA3-2000 PLT 1552		5	
Valve plate Copeland compressor D6RA4-3000 PLT 1552		5	
Valve plate Copeland compressor D4RH1-2500 PLT 1551		5	
Valve plate Copeland compressor D6RH1-3500 PLT 1551		5	
Valve plate Copeland compressor D4RJ1-3000 PLT 1560		5	
Valve plate Copeland compressor 9RP2-1015 PLT 1508		5	
Valve plate Copeland compressor 9RS1-1505 PLT 1545		5	
Valve plate Carrier 06EF - 299 Compressor		3	
Valve plate Carrier 06DA 637 Compressor		3	
Oil Pump Carrier 06EF - 299 Compressor		2	
Oil Pump Carrier 06DA - 637 Compressor		2	
9R Crankcase heater for Copeland Compressor		20	
4 RE2-2000 (100Watt)			
4R Crankcase heater for Copeland Compressor			
9 RT1-1505 (65Watt)		4	
Oil Strainer for Copeland Compressor D4 RH-2500		50	
Oil Strainer for Copeland Compressor 9RP2-10100		50	

Gasket Set for Carrier Compressor 06EF-279		4	
Gasket Set for Carrier Compressor 06DA 637		4	
Gasket Set for Copeland Compressor 4RE2-2000 FSD		4	
Discharge service valve gaskets for Copeland Compressor 4RE2-2000FSD		50	
Sump gasket for Copeland Compressor 4RE2-2000 FSD		20	
Suction service valve gaskets for Copeland Compressor 4RE2-2000FSD		50	
Nose end gaskets for Copeland Compressor 4RE2-2000FSD		50	
Motor end gaskets for Copeland Compressor 4RE2-2000FSD		50	
Unloader gaskets for Copeland Compressor 4RE2-2000FSD		30	
Suction service valve for Copeland Compressor 4RE2-2000FSD		4	
Suction service valve for Copeland Compressor D4RH1-2500FSD		4	
Suction service valve for Copeland Compressor D4RA4-3000FSD		4	
Suction service valve for Copeland Compressor 9RT1-1500FSD		4	
Suction service valve for Copeland Compressor 9RP2-1010FSD		4	
Suction service valve for Copeland Compressor D6RH1-3500FSD		4	
Discharge service valve for Copeland Compressor 4RE2-2000FSD		2	
Discharge service valve for Copeland Compressor D4RH1-2500FSD		2	
Discharge service valve for Copeland Compressor D4RA4-3000FSD		2	
Discharge service valve for Copeland Compressor 9RT1-1500FSD		2	
Discharge service valve for Copeland Compressor 9RP2-1000FSD		2	
Discharge service valve for Copeland Compressor D6RH1-3500FSD		2	
Fanox Relay GL 40, 220V		5	

Fanox Relay GL 90, 220V		5	
EBM Papst Condensor Fan S4D630-AR01-01 (380Volts)		4	
EBM Papst Condensor Fan S4D500 AM03-01 (380Volts)		8	
EBM Papst Condensor Fan S4E350 (220Volts)		3	
EBM Papst Condensor Fan A4S300/AA02-22 (220Volts)		3	
EBM Papst Fan RE2E220-AA40-05(230V,85/90 Watt)		3	
EBM Papst Fan 220V, 10/53W,1300rpm		3	
EBM Papst Fan 220V,90/25W,1300rpm,M4Q045-EA01-14		3	
Domestic Hermetic Compressor 1/3 Hp		6	
Domestic Hermetic Compressor ¼ Hp		6	
Domestic Hermetic Compressor 1/5 Hp		6	
Domestic Hermetic Compressor 1/6 Hp		3	
Domestic Hermetic Compressor 1/8 Hp		6	
Domestic Hermetic Compressor 1/10 Hp		6	
Domestic Hermetic Compressor 1/12 Hp			
3/4" Maksal Softron Copper tube for R410 (1roll is 15,24m)		4	
5/8" Maksal Softron Copper tube (1roll is 15,24m)		2	
1/2" Maksal Softron Copper tube (1roll is 15,24m)		2	
3/8" Maksal Softron Copper tube (1roll is 15,24m)		2	
1/4" Maksal Softron Copper tube (1roll is 15,24m)		2	
7/8" Maksal Softron Copper tube (1roll is 15,24m)		2	
Renolin Vaccum pump oil 32 (5L)		50	

Polyester Oil SL32H (PEO Oil) 1L Container		10	
Hidrox Heavy duty Lime scale Remover (5L)		10	
Den Braven PU-Foam 750ml		10	
Q20 Multi Purpose Lubricant		10	
Q30 Protective Film		10	
Q10 Penetrating Oil		10	
Vibration Eliminator 2 1/8"		3	
Vibration Eliminator 1 3/8"		3	
Vibration Eliminator 1 5/8"		3	
Vibration Eliminator 1 1/8"		3	
		3	
Couplings 1 1/8"Refrigeration		3	
Couplings 1 5/8"Refrigeration		3	
Couplings 1 3/8"Refrigeration		3	
Couplings 1/2"Refrigeration		3	
Couplings 5/8"Refrigeration		3	
Couplings 3/4"Refrigeration		3	
Elbows 1/2" Refrigeration		3	
Elbows 3/8"Refrigeration		3	
Elbows 5/8"Refrigeration		3	
Elbows 3/4"Refrigeration		3	
Elbows 7/8"Refrigeration		3	
Elbows 1 1/2"Refrigeration		3	
Elbows 1 1/8"Refrigeration		3	
		3	
1 5/8" to 1 1/8" Reducer Couplings		3	
1 3/8" to 1 1/8" Reducer Couplings		3	
Single Core Filter Drier Shell 7/8"		3	
Single Core Filter Drier Shell 1 5/8"		5	
Single Core Filter Drier Shell 5/8"		5	
Single Core Filter Drier Shell 1 1/8"		5	
Liquid Line filter drier weld in 3/8"		5	

Liquid Line filter drier weld in ½"		3	
Liquid Line filter drier weld in 7/8"		10	
Liquid Line filter drier weld in 1 1/8"		10	
Liquid Line filter drier weld in 1 3/8"		10	
Liquid Line filter drier Flare 5/8"		8	
Liquid Line filter drier Flare 3/8"		8	
Emerson valve less flange TCLE 5 HC,Part no.PCN 054399,Tons 5,Tube length 5ft,R22		4	
Emerson valve less flange TCLE 7 ½ HC,Part no.PCN 054401,Tons 7 ½,Tube length 5ft,R22		4	
Emerson valve less flange TCLE 10 HC,Part no.PCN 054404,Tons 10,Tube length 5ft,R22		4	
Emerson valve less flange TJRE 14 HC,Part no.PCN 060857,Tons 14,Tube length 5ft,R22		4	
Emerson valve less flange TCLE 12 HC,Part no.PCN 060854,Tons 12,Tube length 5ft,R22		4	
Emerson valve less flange TJRE 18 HC,Part no.PCN 060858,Tons 18,Tube length 5ft,R22		4	
Emerson valve less flange XC 726 HC -28,Part no.PCN 060858,Tons 28,Tube length 5ft,R22		4	
R134A Refrigerant gas – 13.6 kg container		3	
R407C Refrigerant gas – 11.3 kg container		4	
R404 Refrigerant gas – 11.3 kg container		4	
R507A Refrigerant gas – 11.3 kg container		4	
R410A Refrigerant gas – 11.3 kg container		8	
10Kg A-Flush Flushing Liquid		10	
16mm x 16mm Pvc white trunking		15	
16mm x 25mm Pvc white trunking		15	

76mmx76mm galvinised steel trunking complete with lid ,without slots		10	
75mmx75mm Pvc grey trunking complete with lid, without slots		6	
450mm Counter leaver bracket powder coated complete with rawlbolts		4	
600mm Counter leaver bracket powder coated complete with rawlbolts		4	
1/4"x1/4"wall armerflex		20	
3/8"x1/4"wall armerflex		20	
5/8"x1/4" wall armerflex		20	
1/2"x1/4"wall armerflex		20	
3/4"x1/4"wall armerflex		20	
7/8"x1/4" wall armerflex		20	
Fan Blade for Marley 4537p Cooling tower		1	
Bearing housing for Marley 4537P Cooling tower		1	
Fan guard for Marley 4537P Cooling tower		1	
Braided hose,1m, 1/4" x 1/4"		5	
50mm black laso tape		15	
20mm Pvc black or white spraque tubing – 50m		30	
20mm Pvc Couplings		15	
Heat Seal Stick		4	
7/8" Weld in Sight Glass		3	
CT 1178 Cold Room Door Handle Complete		2	
Danfoss HP/LP Dual Pressure switch Manual reset KP15		5	
Danfoss Auto reset Pressure switch KP5		10	
Johnson Temperature controller			
Model A19ABC-41C.Range -30 to 40 Deg		5	
Thermostat Cold room RHH 6206		5	
Solenoid coil 220V ,10W,			
Danfoss SP No.018F6701		6	

Honeywell Room thermostat 220V,Temp.range 10-30Deg.T4360G1006		4	
Pressure relief valve 1/2MPT x5/8FL Set 350Psi		8	
Circular Mounts 75 x 40mm x M10 x 40 x 40mm		50	
Circular Mounts 30 x 30mm x M8 x 20 x 20mm		50	
GCA 326.1E Damper Actuator Rotary SR,230V,18Nm		4	
WSI 332,32Amp 3 pole Isolator Waco ET32M,Weatherproof		6	
WSI 233,32Amp 2 pole Isolator Waco ED32S,Weather proof		6	
Hand shut off valve 1/4"Flare		6	
Hand shut off valve 7/8"Weld in		6	
4 Way reverse valve 1/2" x 3/4"		4	
V-Belt SPZ 962		8	
63 Amp,3Phase,6Ka,Circuit breaker ,Heineman Din rail mount		5	
32 Amp,3Phase,6Ka,Circuit breaker ,Heineman Din rail mount		5	
5 Amp,1Phase,Circuit breaker ,Heineman Din rail mount		10	
30 Amp,3 Phase,Orange toggle Circuit breaker		4	
Insulated Ferrules' 2.5mm		200	
Insulated Ferrules' 1.5mm		200	
CSSD0160 DM3,160 Amp,3 Pole Isolator with pistol grip,handle & 165mm shaft		4	
CSSD0125 DM3,125 Amp,3 Pole Isolator with pistol grip handle & 165mm shaft		4	
Schneider Contactor LC1D18P7,220 V Coil		5	
Schneider Contactor LC1D12P7,220 V Coil		10	
Schneider Contactor LC1D80P7,220 V Coil		5	
Schneider Contactor LC1D40P7,220 V Coil		5	

Schneider Contactor LC1D25P7,220 V Coil		5	
Schneider Contactor LC1D50P7,220 V Coil		5	
Schneider Overload LRD 06 (1 – 1.6 Amp)		6	
Schneider Overload LRD 07 (1.6 – 2.5 Amp)		6	
Schneider Overload LRD 08 (2.5 – 4 Amp)		4	
Schneider Overload LRD 22 (16 – 24 Amp)		4	
Schneider Overload LRD 16 (9 – 13 Amp)		4	
Schneider Aux Contact LADN11		10	
Schneider Aux Contact LADN 22		6	
Schneider Aux Contact LADN 40		4	
DN33Z9MR20 Carel Controller Din Rail Mount		6	
NTC 015 HP Duct Probe for Carel Controller		6	
Siemens RAK-TB.1410B-M Overheat stat		6	
Lamp 16 Watt,2D,2Pin		50	
Kraus & Naimer Switch CA10 A221-601E		6	
Kraus & Naimer Switch CA10 A200-620E		6	
Kraus & Naimer Switch CA10 A401-601E		6	
Kraus & Naimer Switch CA10 A220-601E		6	
Silicon wire 10mm Red (per meter)		100	
Silicon wire 10mm White (per meter)		100	
Silicon wire 10mm Blue (per meter)		100	
Cabtyre 1,5 mm, 5 Core		100	

Cabtyre 1,5 mm,7 Core		100	
LP Glycerine filled gauges Panel Mount			
RHH 6303		10	
HP Glycerine filled gauges Panel Mount			
RHH 6302		10	
Plummer Block SNH/SNU 509		4	
Plummer Block SNK 508-607		4	
Plummer Block SNH 510-608		4	
Plummer Block SN 508		4	
Plummer Block SNU 507		4	
Adaptor sleeve H308		6	
Adaptor sleeve H309		6	
Adaptor sleeve H307		6	
Adaptor sleeve H311		6	
U509 U-Lock Seals (1 set,4 pieces)		6	
U508 U-Lock Seals (1 set,4 pieces)		6	
U511 U-Lock Seals (1 set,4 pieces)		6	
22210 CCK C3W33 Taperlock Bearings		6	
22209 CCK C3W33 Taperlock Bearings		6	
22207 CKE4C3511 Taperlock Bearings		6	
22211 EK.C3 Roller Bearings		6	
21309K/C3W33 Roller Bearings		6	
2208 E1KC3 Roller Bearings		6	
1208 CCK C3W33 Taperlock Bearings		6	
Locating Rings for Plummer Block SNH 509		6	
R410 Totaline Manifold Set Including Pipes		3	

Copper flow 3mm welding rods		10	
Carrier High wall Split Inverter 9000 Btu		4	
Carrier High wall Split Inverter 12 000 Btu		6	
Carrier High wall Split Inverter 18 000 Btu		4	
Carrier High wall Split Inverter 22 000 Btu		4	
Carrier High wall Split Inverter 36 000 Btu		4	
Carrier Under Ceiling Inverter 18 000 Btu		2	
Carrier Under Ceiling Inverter 36 000 Btu		2	
Carrier Under Ceiling Inverter 48 000 Btu		2	
Carrier Under Ceiling Inverter 60 000 Btu		2	
Carrier High wall Split Non Inverter 9 000 Btu		4	
Carrier High wall Split Non Inverter 12 000 Btu		6	
Carrier High wall Split Non Inverter 18 000 Btu		4	
Carrier High wall Split Non Inverter 24 000 Btu		4	
Carrier High wall Split Non Inverter 30 000 Btu		4	
Carrier High wall Split Non Inverter 36 000 Btu		3	
Carrier Under Ceiling Non Inverter 36 000 Btu		2	
Carrier Under Ceiling Non Inverter 48 000 Btu		2	
Carrier Under Ceiling Non Inverter 60 000 Btu		2	
Carrier Casette Inverter 12 000 Btu		2	
Carrier Casette Inverter 18 000 Btu		2	
Carrier Casette Inverter 24 000 Btu		2	

Carrier Casette Inverter 36 000 Btu		2	
Carrier Casette Inverter 48 000 Btu		2	
Carrier Casette Inverter 52 000 Btu		2	
Carrier Casette Non Inverter 12 000 Btu		2	
Carrier Casette Non Inverter 18 000 Btu		2	
Carrier Casette Non Inverter 24 000 Btu		2	
Carrier Casette Non Inverter 36 000 Btu		2	
Carrier Casette Non Inverter 48 000 Btu		2	
Carrier Casette Non Inverter 52 000 Btu		2	
Carrier Floor standing unit 60 000 Btu		2	
Carrier Floor standing unit 76 000 Btu		2	
Carrier Floor standing unit 96 000 Btu		2	
Carrier Ducted split Non Inverter 60 000 Btu		1	
Carrier Ducted split Non Inverter 70 000 Btu		1	
Carrier Ducted split Non Inverter 93 000 Btu		1	
Carrier Ducted split Non Inverter 135 000 Btu		1	
Carrier Ducted split Non Inverter 170 000 Btu		1	
Carrier Window Wall Non Inverter 11 500 Btu		2	
Carrier Window Wall Non Inverter 18 000 Btu		2	

Name and Surname: Hennie Botha

Signature:

