

WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY:	DD/JC	CHECKED BY:	AG, REV1: JC/DD
DESIGN DATE:	2010-06-10	CHECK DATE:	11/30/2010, REV1: 01/24/2011
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U700 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 445 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM, PRE-PAINTED GALVANIZED STEEL	INSULATION:	FOIL FACED INSULATION IN HEAT EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	556 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	GALVANIZED STEEL
MOTOR SIZE:	0.37 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR	RIGHT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		406 x 635 x 19 WASHABLE TYPE
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL): 2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION: FLAT
SPARES:		

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	10%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	17.6 kW (60,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	16.4 kW (56,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	25°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U700 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	10.6 KW (3 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	2.4 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,394 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	10.6 KW (3 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U705 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 533 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM, PRE-PAINTED GALVANIZED STEEL	INSULATION:	FOIL FACED INSULATION IN HEAT EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	755 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	GALVANIZED STEEL
MOTOR SIZE:	0.56 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR	LEFT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		508 x 635 x 19 WASHABLE TYPE	
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION:	FLAT
SPARES:			

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	10%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	23.4 kW (80,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	21.7 kW (74,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	24°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U705 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	14 KW (4 tons of refrigeration)
REFRIGERANT:	R-410A	REFRIGERANT CHARGE:	3.2 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	14 KW (4 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U710 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 622 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM, PRE-PAINTED GALVANIZED STEEL	INSULATION:	FOIL FACED INSULATION IN HEAT EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	944 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	GALVANIZED STEEL
MOTOR SIZE:	0.56 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	BOTTOM		
RETURN AIR	TOP		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		2 - 406 x 635 x 19 WASHABLE TYPE	
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION:	FLAT
SPARES:			

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	35%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	35.1 kW (120,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	32.8 kW (112,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	29°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U710 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	13.5	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	17.6 KW (5 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	3.7 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	17.6 KW (5 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U780 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	FRONT SIDE, 0.76 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	724 L x 445 W x 1029 H		
CASING:	0.76 mm THICKNESS MINIMUM, PRE-PAINTED GALVANIZED STEEL	INSULATION:	FOIL FACED INSULATION IN HEAT EXCHANGER SECTION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	378 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	INTERNALLY SOFT MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	GALVANIZED STEEL
MOTOR SIZE:	0.25 kW	TYPE:	PSC TYPE
BHP:	kW	DRIVE:	MULTI SPEED, DIRECT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR	RIGHT SIDE		
OUTSIDE AIR	RETURN AIR DUCT		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		1 - 406 x 635 x 19 WASHABLE TYPE	
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION:	FLAT
SPARES:			

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	10%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	11.7 kW (40,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	10.8 kW (37,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	24°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	ALUMINIZED STEEL
SECONDARY MATERIAL:	ALUMINIZED STEEL
DRAIN PAN:	ALUMINIZED STEEL

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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U780 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14.25	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	7 KW (2 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	1.7 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,047 L/s
MOTOR SIZE:	0.075 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	7 KW (2 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U785 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	1 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	775 L x 400 W x 1425 H		
CASING:	1 mm THICKNESS MINIMUM, SATIN COATED SHEET METAL WITH BAKED POWDER COATED ENAMEL FINISH	INSULATION:	13 mm FOIL BACKED FIBERGLASS INSULATION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	283 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	RUBBER MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	STEEL
MOTOR SIZE:	0.19 kW	TYPE:	
BHP:	kW	DRIVE:	BELT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR			
OUTSIDE AIR	LEFT SIDE		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		1 - x x 25 WASHABLE TYPE	
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION:	FLAT
SPARES:			

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	100%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	19 kW (65,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	15.2 kW (52,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	45°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	STAINLESS STEEL
SECONDARY MATERIAL:	STAINLESS STEEL
DRAIN PAN:	STAINLESS STEEL

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CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U785 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14.5	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	5.3 KW (1.5 tons of refrigeration)
REFRIGERANT:	R-410A	REFRIGERANT CHARGE:	1.6 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	846 L/s
MOTOR SIZE:	0.062 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	5.3 KW (1.5 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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WORK SHEET:	AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS		
DESIGNED BY:	DD/JC	CHECKED BY:	AG, REV1: JC/DD
DESIGN DATE:	2010-06-10	CHECK DATE:	11/30/2010, REV1: 01/24/2011
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT		
JOB NAME:	WEWPCC HVAC REPLACEMENT		
JOB NO.:	CW-10-M660-1		

TAG:	U787 - REV1
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GENERAL & CABINET

UNIT TYPE:	FORCED AIR FURNACE	UNIT MODEL NO.:	CARRIER 58MCB, ENGA XE OR APPROVED EQUAL IN ACCORDANCE WITH B6
MOUNTING:	INDOOR BASE MOUNTED (Heated Space)	SERVICE ACCESS:	1 mm THICK REMOVABLE ACCESS PANEL
APPROX. SHIPPING WEIGHT:	kg	NO. OF PIECES:	1
MAXIMUM DIMENSIONS:	775 L x 813 W x 1500 H		
CASING:	1 mm THICKNESS MINIMUM, SATIN COATED SHEET METAL WITH BAKED POWDER COATED ENAMEL FINISH	INSULATION:	13 mm FOIL BACKED FIBERGLASS INSULATION
APPROVALS:	CSA 2.3, CETL, ETL AND REQUIREMENTS OF LOCAL AHJ (DOL MECHANICAL & ENGINEERING BRANCH)		

SUPPLY AIR DATA

AIR FLOW (NORMAL):	788 L/s	ESP:	187 Pa (0.75 inch W.C.)
FAN SIZE:		QTY:	1
FAN TYPE:	CENTRIFUGAL	RPM:	
MOUNTING:	RUBBER MOUNTED	TSP:	Pa
MAX. SOUND POWER LEVEL:	dba		
HOUSING CONST.:	STEEL	WHEEL CONST.:	STEEL
MOTOR SIZE:	0.56 kW	TYPE:	
BHP:	kW	DRIVE:	BELT DRIVE, SF OF DRIVE 1.5

AIR OPENINGS	LOCATION	DAMPER TYPE	OPERATION
SUPPLY AIR	TOP		
RETURN AIR			
OUTSIDE AIR	LEFT SIDE		
EXHAUST AIR			
PROFILE PLATE			

FILTER DATA (FILTERS MOUNTED IN METAL FRAMES)

QTY/SIZE/TYPE:		1 - x x 25 WASHABLE TYPE	
TOTAL GROSS AREA:	m ²	FACE VELOCITY (MAX/ACTUAL):	2.23 m/s (MAX)/ m/s (ACT)
FRAME:		ORIENTATION:	FLAT
SPARES:			

MIXED AIR SECTION

BAFFLING:	NO	ACCESS SIDE:	N/A
RELIEF:	NO	RELIEF AIR DAMPER:	NO
OUTDOOR AIR DAMPER:	NO	RETURN AIR DAMPER:	NO
OUTDOOR AIR REQUIREMENT:	100%		

HEATING SECTION DATA

TYPE:	INDIRECT-FIRED	BURNER TURNDOWN:	
GAS SUPPLY:	NATURAL GAS	HEAT INPUT:	65.9 kW (225,000 Btuh)
INLET PRESSURE:	3,487 Pa	HEAT OUTPUT:	52.8 kW (180,000 Btuh)
FIELD CONNECTION SIZE:	mm	TEMPERATURE RISE:	56°C

FIXED PLATE HEAT EXCHANGER

PRIMARY MATERIAL:	STAINLESS STEEL
SECONDARY MATERIAL:	STAINLESS STEEL
DRAIN PAN:	STAINLESS STEEL

WORK SHEET: AREA U - ADMINISTRATION BUILDING - FURNACE SPECIFICATIONS	
DESIGNED BY: DD/JC	CHECKED BY: AG, REV1: JC/DD
DESIGN DATE: 2010-06-10	CHECK DATE: 11/30/2010, REV1: 01/24/2011
CUSTOMER:	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
JOB NAME:	WEWPCC HVAC REPLACEMENT
JOB NO.:	CW-10-M660-1

TAG:	U787 - REV1
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CONDENSER

UNIT TYPE:	AIR COOLED	UNIT MODEL NO.:	CARRIER 24ABB3 OR APPROVED EQUAL IN ACCORDANCE WITH B6
SEER (MAXIMUM):	14	CABINET:	GALVANIZED STEEL, BONDERIZED, POWDERCOATED
OPERATING WEIGHT:	Kg	CAPACITY:	14 KW (4 tons of refrigeration)
REFRIGERANT:	R-410A	REGRIGERANT CHARGE:	3.2 KG
COMPRESSOR TYPE:	SCROLL	COIL:	MECHANICALLY BONDED ALUMINUM FINS TO COPPER TUBES
FACE AREA:	m ²	FINS PER INCH:	
ROWS:		CIRCUITS:	
COOLING FAN:	PROPELLER TYPE, DIRECT DRIVE	AIRFLOW:	1,588 L/s
MOTOR SIZE:	0.19 Kw	AIR DISCHARGE:	VERTICAL
MOTOR SPEED:	RPM	ELECTRICAL:	208 VOLTS 1 PHASE 60 HZ

COOLING COIL

UNIT TYPE:	DX, VERTICAL N-TYPE	UNIT MODEL NO.:	CARRIER CNPVU OR APPROVED EQUAL IN ACCORDANCE WITH B6
CABINET:	UNCASED	TUBE MATERIAL:	COPPER
CAPACITY:	14 KW (4 tons of refrigeration)	REFRIGERANT:	R-410A

ELECTICAL DATA

UNIT POWER SUPPLY:	115 VOLTS 1 PHASE 60 HZ	CONTROL CIRCUIT:	AMPS
SUPPLY MOTOR F.L.A.:	AMPS	MAX. FUSE (D.E.):	AMPS
MAIN FEEDER AMPACITY:	AMPS	MAX. BREAKER:	AMPS
DISCONNECT SWITCH:	NON FUSED - BY OTHERS		

CONTROL DATA

Applicable Documents:	Specification 23 54 16
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