

# ALBERTA

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### EXCLUSIVE BRANDS



#### YORK

- Packaged commercial rooftop units
  - Self-contained units
- DOAS Dedicated Outdoor Air Systems
  - Air handlers custom and modular
  - Custom coils



**Blauberg**  
ERV/HRV



**Dry Solutions**  
Dehumidification



**Elios**  
AC mini-splits (builders series)



**Hitachi**  
VRF & -40 Splits



**Innovent**  
Custom air handling and energy recovery equipment designed for specific application



**Southampton Industrial**   
Custom air handlers



**Valent**  
Highly configurable dedicated outdoor air solutions (DOAS units)



**CaptiveAire**  
Make up air and Dedicated Outdoor Air Systems (DOAS)



**Direct Coil**   
Free Standing Coils,  
Fluid Coolers & Condensers



**Friedrich**  
PTAC, TTW, Vert-I-Pak



**KeepRite Refrigeration**  
Air cooled condensing units, fluid coolers, condensing units, free standing coils



**Nu-Air**   
Energy and heat recovery ventilators



**Olimpia Splendid**  
Heat pumps without outdoor condenser



**RefPlus**   
Condensing units, fluid coolers, adiabatic coolers, and free standing coils



**Sanuvox**   
UV air purification systems



**Thermoplus Air**   
Arena Dehumidifiers



# PRODUCT LINE CARD

## ALBERTA

# APPLIED HYDRONICS & HEATING

### EXCLUSIVE BRANDS



#### YORK

- Chillers
- Air Source Heat Pumps



#### Jetson

Modular Chillers, modular air-to-water heat pumps, condensing units



#### Johnson Controls

Water source heat pumps, vertical and horizontal fan coil units



#### Laars

Commercial boilers and water heaters



#### Omega Heat Pumps

Water-source and hybrid heat pumps

*\*Not Exclusive in Edmonton*



#### Steffes

Off-Peak ETS heating systems



#### Transfab Énergie

Industrial & commercial boilers, storage tanks, and steam accessories



#### AIC

Heat exchangers



#### AO Smith

Water heaters and tanks



#### Axiom

Glycol feed pumps



#### Biddle

High efficiency air curtains



#### Calefactio

Hydronic accessories



#### Calefactio Radiant

Hydronic radiant floor & snow melting



#### Caleffi

Hydronic specialties, air/dirt separators, low loss headers hydraulic separators



#### Centrotherm

Polypropylene flue-gas venting systems



#### Ceptek

Modular/custom water to water heat pump for heating/cooling and DHW applications



#### Express Radiant

Infrared radiant heaters



#### Grundfos

Circulating pumps



#### Hayward

Pool heaters



#### Norgas Controls

Natural gas regulators, valves, gas & water meters



#### Paco Pumps

Commercial pumps



#### Reznor

Unit heaters



#### Rinnai

Commercial water heaters and condensing boilers



#### Schwank

Infrared radiant heaters and air curtains



#### Sigma

Cabinet heaters, architectural enclosures, convectors, radiant panels, etc.



#### Space-Ray

Infrared radiant gas heating solutions



#### Thermo 2000

Electric boilers, storage tanks



### EXCLUSIVE BRANDS



**Airus**  
Air circulation and  
air purification



**Blauberg**  
ERV/HRV



**Elios**   
Electric duct heaters  
and MAU's



**nad Klima**   
High induction diffusers  
and air curtains/pumps



**Twin City Fan**  
Commercial fans



**Tjernlund**  
Ventilation accessories



**Air Concepts Inc.**  
Concentric grilles and diffusers



**Air Vector**   
Commercial grilles  
and diffusers



**AlumaVent**   
Louvers, control and fire dampers



**Broan**  
Bathroom Fans



**Canarm HVAC**   
Commercial Fans



**Envira-North**   
Large blade fans for HVLS  
commercial applications,  
industrial, and warehouses



**FabricAir**  
Flexible fabric air ducts  
in NFPA-25/50 for institutional,  
commercial and food  
applications



**Fantech**   
Inline Fans



**Panasonic**  
Bathroom fans  
venting systems



**Plymovent**  
Extraction arms for welding  
and cutting fume removal from  
vehicles, garages and fire stations



**Reversomatic**   
Fans and ventilation accessories  
for light commercial and  
residential applications



**Soler & Palau**  
Commercial fans



**United Enertech**  
Louvers and dampers



**Ventex**   
Louvers, control and fire dampers



# PRODUCT LINE CARD

## ALBERTA

# REFRIGERATION



### Alfa Laval

Plate heat exchangers



### Bohn

Evaporators, air cooled condensers, fluid coolers, condensing units, central refrigeration plants



### Doucette Industries

Desuperheaters



### Full Gauge

Controls



### KE2 Therm Solutions

Controls, valves



### Norbec

Freezer and walk-in panels



### Sporlan

Valves



### Thermoplus Air

Arena dehumidifiers

### COPELAND



### Copeland

Control valves & system protectors

### COPELAND

### Copeland

Condensing units, compressors



### Drake Chillers

Chillers



### Great Lakes Copper

ACR, med, soft ACR copper tubing, Type L, Type K, UL700 certified



### KeepRite Refrigeration

Air cooled condensers, fluid coolers, evaporators, condensing units



### Parker

Valves



### Standard Xchange

Shell & tube heat exchangers, tanks, oil separators, suction accumulators



### Temprite

Oil separators



### Armacell

AP armafex pipe, sheet foam insulation



### Cool Master

Freezer and walk-in panels



### Copeland

Facility controls and electronics



### Henry Technologies

Shell & tube heat exchangers, receivers, oil separators, suction accumulators, accessories



### Mueller Industries

Desuperheaters, valves, accessories



### RefPlus

Air cooled condensers, fluid coolers, condensing units, custom coils, evaporators



### Svep

Brazed plate heat exchangers



### Westermeyer Industries

Receivers, oil separators, suction accumulators, shell & tube heat exchangers



### Bitzer

Compressors, condensing units, water cooled condensers



### Danfoss

Compressors, condensing units



### FlatPlate

exchangers, chillers, condensers, radiant floors



### Johnson Controls

Controls, valves



### NDL Inc.

ACR/WROT copper fittings, ball valves, filter driers, ASME & TSSA rating approved



### Refrigeration Research, Inc.

### Refrigeration Research

Receivers, suction accumulators, oil separators, accessories



### tecumseh

### Tecumseh

Compressors, condensing units



### Yellow Jacket

Refrigerant recovery, vacuum pumps, hoses and refrigeration gauges tanks



# PRODUCT LINE CARD

## ALBERTA

# RESIDENTIAL

### EXCLUSIVE BRANDS



**YORK**

Air conditioners and heat pumps for central systems, gas and electric furnaces



**HEATING AND AIR CONDITIONING**

**Coleman**

Air conditioners and heat pumps for central systems, gas and electric furnaces



**Elios**

Ductless units



**Friedrich**

Window units, TTW, PTAC, Vertipak & VRP



**Moovair**

Ductless units, air exchangers ERV/HRV



**Alubase**

Wall brackets & floor stands



**ADP**

Air handlers and hydronic DX coils



**A.M.T.S.**

Air handlers and hydronic DX coils



**Aprilaire**

Humidifiers



**ecobee**

Thermostats



**ElectroAir**

Throwaway and electronic filters



**Fantech**

Air Exchangers, ERV/HRV



**Filtration Group**

Replacement Filters



**Fortress**

Lineset covers



**Fujitsu Airstage**

Ductless units & mini VRF, complete line of VRF



**GeneralAire**

Humidifiers, dehumidifiers and filters



**Generac**

Generators



**Johnson Controls**

Thermostats



**Laars**

Residential boilers and water heater



**Mars/ComfortAire**

Horizontal side discharge condensers



**Norgas Controls**

Natural gas regulators, valves, gas & water meters



**Resideo**

Thermostats, humidifiers, filters



**Rinnai**

Tankless water heaters and condensing boilers



**Sanuvox**

Ultraviolet air treatment systems, UV air purifiers



**Space-Ray**

Infrared radiant gas heating solutions



**Source1**

OEM York parts



**Stelpro**

Electric Furnaces and electric duct heaters



**Thermeau**

Pool heat pumps



**vanEE**

Air exchangers, ERV/HRV



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# PRODUCT LINE CARD

## ALBERTA

# PUMPS & WATER TREATMENT



**Armstrong**  
Circulator Pumps & Components



**Aquatec**  
Diaphragm Pumps



**Berkeley**  
Pumps & Accessories



**Caleffi**  
Hydronics



**Fernox**  
Boiler Additives & Filtration



**Flowline**  
Ultrasonic Level



**Greyline instruments inc.**  
Ultrasonic Level



**Heron Instruments Inc.**  
Well Monitoring



**Aqua Flo**  
Cartridges



**Avista**  
RO Membrane Chemicals



**Boshart Industries inc.**  
Fluid Handling Accessories



**Conbraco**  
Regulators & Relief Valves



**Myers - Pentair**  
Water Treatment Equipment



**Franklin Electric**  
Water System Products & Controls



**Grundfos**  
Circulator Pumps, Water System Pumps  
& Chemical Pumps



**HYTEK**  
PVC Fittings & Pipe



**AUTOTROL VALVES**

**Autotrol Valves - Pentair**  
Water Treatment Equipment



**Bell & Gossett**  
Circulator Pumps & Components



**EBARA**  
Pumps



**Fabco Plastics**  
PVC Products



**Flexcon Industries**  
Pressure & Retention Tanks



**GOOD**  
Water Treatment



**HACH**  
Water Testing Products



**John Guest**  
Fittings



# PRODUCT LINE CARD

## ALBERTA

## PUMPS & WATER TREATMENT



**Koflo**  
Static Mixers



**Marlo**  
Industrial Membrane Systems



**Oberdorfer Pumps**  
Pumps



**Pentek Filtration - Pentair**  
Water Systems, Drives, Cartridges



**Seametrics**  
Flow Meters & Controls



**SJE Rhombus**  
Liquid Level Controls, Variable Frequency  
Drives & Controls



**Taco**  
Circulator Pumps & Components



**Water Group**  
Water Treatment Products



**Liberty Pumps**  
Pumps



**Milton Roy**  
Chemical Pumps



**Peerless Pump**  
Pumps



**QMP Products**  
Poly Tanks



**Sensorex**  
Smart Meter & Sensors



STA-RITE®

**Sta-Rite - Pentair**  
Pumps & Tanks



**Tsurumi Pump**  
Pumps



**Walchem**  
Chemical Feed Pumps



**Little Giant**  
Pumps & Accessories



**MYERS®**  
**Myers - Pentair**  
Pumps & Tanks



**Pentair**  
Softeners & Filters



**Reonix Automation**  
Cellular Modem



**SHURFLO®**  
**Shurflo - Pentair**  
Booster Pumps



**Stenner Pumps**  
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**Watts**  
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**Master distributor for:**



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- Belts, Sheaves and Couplings
- Circulating Pumps and Motors

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- Specializing in OEM Replacements
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SOPERS\_0126



**YOUR REPLACEMENT  
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# Motor facts, tips & useful formulas

## Motor Types

<p><b>Shaded-Pole:</b> Used where low-cost and low power outputs are required. They have low-starting torque and are inefficient. They are used to drive blowers, bathroom ventilators, range hoods, etc. Suitable for use with solid state type speed controls.</p> <p><b>Permanent-Split Capacitor: (PSC)</b> Used in a variety of direct-drive, air-moving applications where fairly low starting torque and higher efficiencies are required such as outdoor condenser fans. Generally not suitable for belt drive applications. Suitable for use with solid state type speed controls.</p> <p><b>Split Phase:</b> High-starting torque motors suitable for belt-drive applications such as furnace blowers. They are more efficient than Shaded-Pole motors but not as efficient as Permanent-Split Capacitor motors. Not suitable for use with any type of electrical speed control.</p>	<p><b>Capacitor Start: (Induction &amp; Capacitor Run)</b> Highest starting torque motors. Suitable for use in various hard to start applications such as compressors, pumps and many belted applications. Not suitable for use with any type of electrical speed control.</p> <p><b>ECM: (Electronically Commutated Motor)</b> Ultra high efficient, electronically controlled motors. This motor design allows for exacting speed control and maintains high torque at start and over a broad speed range. Can be used in many consumer and commercial applications in place of conventional type motors such as the Shaded-Pole and PSC designs.</p> <p><b>Three Phase:</b> High efficient motor design. They are typically used in industrial or commercial applications where three-phase power is available. Some three-phase motors are suitable for use with Variable Frequency Drives (VFD's).</p>
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## Horsepower Conversion Chart

Use to convert decimal horsepower to commonly available fractional horsepower motors.  
(For watt conversion, use the formula 745.7 watts = 1 HP)

Decimal Horsepower																	
0.010	0.014	0.017	0.020	0.025	0.033	0.040	0.050	0.067	0.083	0.100	0.125	0.167	0.250	0.333	0.500	0.750	1.000
Fractional Horsepower																	
1/100	1/70	1/60	1/50	1/40	1/30	1/25	1/20	1/15	1/12	1/10	1/8	1/6	1/4	1/3	1/2	3/4	1

## Belt Length Calculation

When belt length is unknown, try using the following formula:

$$PL = 2C + 1.57(D+d) + \frac{(D-d)^2}{4C}$$

PL = Belt pitch length

C = Centre distance (between pulleys)

D = Pitch diameter of large pulley

d = Pitch diameter of small pulley

Using the belt pitch length obtained above, choose a belt with the closest nominal pitch length or call your nearest Soper's branch for your belt requirements.

## Belt Equivalents

'A' & 'B' = '4L' & '5L'

A belt - 4L (add 2 sizes) ie - A18 (20" OD) = 4L200, A78 (80" OD) = 4L800

B belt - 5L (add 3 sizes) ie - B27 (30" OD) = 5L 300, B77 (80" OD) = 5L800

## Determining Belted Fan & Blower RPM

$$\frac{\text{Drive Pulley}}{\text{Driven Pulley}} \times \frac{(\text{X}) \text{ Fan or Blower RPM}}{\text{Motor RPM}}$$

Please note: Use pulley datum diameter with appropriate belt type (A,B,4L or 5L) to provide more accurate results.

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