SIEMENS
Ingenuity for life





# Your Siemens Motion Controls Guide

Siemens VFDs, Servo Drives and Motors designed to work together

Available in stock across Western Canada at your local E.B. Horsman & Son location



Western Canadian independently owned full line electrical distributor since 1900



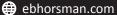
LOW-VOLTAGE MOTORS FOR LINE AND CONVERTER OPERATION						
General	Purpose	Severe Duty		Explosion Protected	Definite Purpose	
SIMOTICS GP100	SIMOTICS GP100A	SIMOTICS SD100	SIMOTICS SD200	SIMOTICS XP	SIMOTICS DP100	SIMOTICS DP200
1 - 200 HP	1 - 20 HP	1 - 400 HP	350 - 800 HP	1 - 300 HP	3 - 250 HP	400 - 800 HP

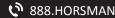
MOTION CONTROL MOTORS				DC MOTORS	
	Motors OTICS S	Main Motors SIMOTICS M	Linear Motors SIMOTICS L	Torque Motors SIMOTICS T	SIMOTICS DC
Servo motors	Servo geared motors				
0.05 - 34.2 kW	0.5 - 7 kW	2.8 - 1,340 kW	1.7 - 81.9 kW	1.7 - 380 kW	up to 1,610 kW

#### Siemens extensive SIMOTICS motor product line

SIMOTICS industrial electric motors provide you with the optimum solution for every application. Backed by 150 years of experience, SIMOTICS motors are unrivaled when it comes to reliability, ruggedness, compactness, efficiency, and performance. SIMOTICS electric motors include:

- Low voltage AC motors for line and converter operation
- Precise motion control motors with highly-dynamic performance for positioning and handling, as well as for use in production machines and machine tools
- DC motors and powerful high-voltage motors for use in ships, rolling mills, ore mills, and large mud pumps and compressors in the oil and gas industry







## SINAMICS V20

#### Easy-to-use

#### Easy-to-save-money



#### All from a single source

#### Easy-to-install

Description

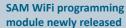
	1AC	3AC	
Power Range	0.17 – 4 hp 0.12 – 3 kW	0.5 – 40 hp 0.37 – 30 kW	
Degree of protection	IP20		
Voltage range	1 AC 200 V 240 V (+ / - 10%)	3 AC 380 V 480 V (+10% / - 15%)	

**Power Ranges** 

## SINAMICS G120



G120X	ideal	for W	WWTP





#### No software needed

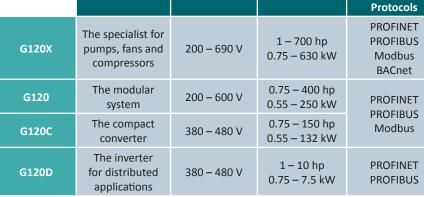


Program, command and monitor from your phone, tablet or PC



#### **G120X** available with BACnet protocol





**Voltage Ranges** 



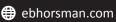


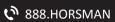




Maior

Communication







## SINAMICS S210



The SINAMICS S210 Servo Drive System is a single axis AC/AC drive with enhanced features, connectivity and performance for motion control applications in the midrange segment.

The new servo drive system comprises the SINAMICS S210 servo drive, the SIMOTICS S-1FK2 servo motor in a compact or high dynamic version and a dedicated "One-Cable-Connection" between motor and drive.

Features	Benefits
<ul> <li>Dedicated S-1FK2 motor(HD/CT)</li> <li>Fast Current Controller (62,5 μs)</li> <li>Fast PROFINET IRT (250 μs)</li> <li>22-Bit Single-&amp; Multiturn Enc. DC-Coupling (for 3-AC units)</li> </ul>	Increase performance
<ul> <li>Basic &amp; Extended Safety integrated functions via PROFIsafe</li> </ul>	Fulfill high demands for safety
<ul> <li>Integrated Webserver</li> <li>"One Button Tuning"</li> <li>TIA Portal (V15.1) integrated**)</li> <li>TIA Selection Tool integrated</li> </ul>	Easy engineering
<ul><li>One-Cable-Connection (OCC)</li><li>Integrated EMC Filter</li><li>Integrated Braking Resistor</li></ul>	Safes time on installation
<ul> <li>1AC 230V (200-240V) 0.05 - 0.75kW</li> <li>3AC 400V (200-480V) 0.4 - 7kW*)</li> <li>UL Certification</li> </ul>	Ready for world wide markets

## SINAMICS S120



The modular drive system for applications at the highest level

SINAMICS S120 offers solutions for high-performance single and multi-axis drives

- » Power range: 0.12 kW 5700 kW
- » Servo /vector control V/f control
- » Integrated safety and positioning functions
- » Additional motion control functions in conjunction with SIMOTION or SINUMERIK
- » High degree of scalability flexibility and combinability
- » Energy efficiency as a result of the energy recovery capability and/or common DC link
- » Communication: PROFIBUS / PROFINET / EtherNet/IP / CANopen / Modbus TCP
- » Advanced Technology Functions for individual and at the same time efficient drive
- » solutions (DCC and TEC)
- » SINAMICS web server for efficient diagnostics and maintenance





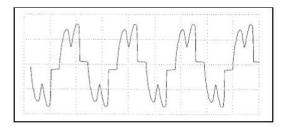


Reactors are designed to address issues associated with variable frequency drives:

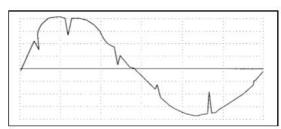
- Attenuate voltage and current transients to reduce voltage notching
- Improve True Power Factor
- Mitigate drive nuisance tripping
- · Minimize harmonic current

- On output, reduce the motor temperature & audible noise
- Enhance the overall performance, life expectancy, and system efficiency
- Mitigate motor bearing failures

#### without Reactors



#### with Reactors









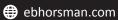


## **VFD TRAINING OFFERED**

#### Master Siemens Variable Frequency Drive Systems

E.B. Horsman's Process, Automation and Controls (PAC) team is offering hands-on training on Siemens VFD. This course goes beyond basic technical information; drawing on decades of trades supervision, technical management, equipment design, commissioning and production downtime troubleshooting experience allows us to create training material that is laser focused on your needs.

Request your training now by emailing GetPAC@ebhorsman.com







## Process Automation Controls

## An E.B. Horsman & Son Division

Overcome difficult industrial automation, control, and motion challenges with the help of our specialized team. Our technical expertise, strong supplier partnerships and extensive branch network for logistics, inventory and application support can help take you all the way from specifications and design support to delivery. We have one of the largest teams for automation, controls, & motion amongst full line electrical wholesalers in Western Canada.

- Specifications and Design Support
- **Product Selection Recommendations**
- Quotation
- **Inventory Support & Supply Management**
- **Delivery Logistics**
- **Training**
- **Post-Sale Technical Support**



GetPAC@ebhorsman.com



## View this **Guide Online**





## **20 Branches Across Three Provinces**

**BC LOWER MAINLAND** 

#### **Burnaby**

3935 2<sup>nd</sup> Avenue Burnaby, BC V5C 3W9 Tel: 604.292.4800

#### Langley

#101 - 20550 Duncan Way Langley, BC V3A 7A3 Tel: 604.533.1275

#### Richmond

12360 Vickers Way Richmond, BC V6V 1H9 Tel: 604.273.1981

13055 80<sup>th</sup> Avenue Surrey, BC V3W 3B1 Tel: 604.596.7111

#### NORTHERN BC

#### Dawson Creek

1121 97<sup>th</sup> Avenue Dawson Creek, BC V1G 1N5 Tel: 250.782.4896

#### **Prince George**

2255 S. Quinn Street Prince George, BC V2N 2X4 Tel: 250.563.0575

#### Terrace

5000 Pohle Avenue Terrace, BC V8G 4S8 Tel: 250.635.6379

#### Williams Lake

527 S. MacKenzie Avenue Williams Lake, BC V2G 1C8 Tel: 250.392.7795

#### **BC INTERIOR**

#### Cranbrook

Unit A 800 Industrial Road # 2 Cranbrook, BC V1C 4C9 Tel: 250.489.4591

#### Kamloops

B - 983 Camosun Crescent Kamloops, BC V2C 6G1 Tel: 250.374.3191

#### Penticton

401 Okanagan Avenue Penticton, BC V2A 3K1 Tel: 250.492.4032

#### Vernon

5203 24th Street Vernon, BC V1T 8X7 Tel: 250.545.2191

#### **VANCOUVER ISLAND**

#### **Campbell River**

1030 B - 9th Avenue Campbell River, BC V9W 4C2 Tel: 250.287.9265

#### Courtenay

2615 Moray Place Courtenay, BC V9N 8A9 Tel: 250.334.0338

#### **Duncan**

5286 Polkey Road Duncan, BC V9L 6W3 Tel: 250.748.3377

#### **Parksville**

1023 Herring Gull Way Parksville, BC V9P 1R2 Tel: 250.v954.1797

#### Victoria

816 Cloverdale Avenue Victoria, BC V8X 2S8 Tel: 250.475.1999

#### **ALBERTA**

#### Calgary

Bay 17, 10551 50th Street SE Calgary, AB T2C 3E3 Tel: 587.620.0020

#### Edmonton

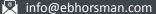
7223 68<sup>th</sup> Avenue NW Edmonton, AB T6B 3T6 Tel: 780.490.7740

#### SASKATCHEWAN

#### Saskatoon

134 – 815 66th Street Saskatoon, SK S7P 0E6 Tel: 306.244.2200







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