

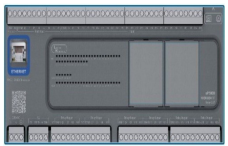
LK PRODUCTS

PLCs

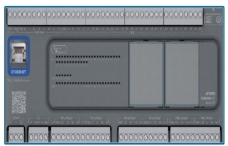
xP1000
xP3000
xP5000
xP6000



xP1000



xP3000



xP5000

HMIs

xT1000
xTE6000
xTS6000



SCADA

EMS
PMS

AC DRIVES/VFD

xD1000
xD2000
xD3000
xD4000
Fx2000



xD1000



xD3000



xD2000



SOFT STARTERS

xs1000
xs2000
xs3000
xs4000



xs1000



Lauritz Knudsen (LK) DRIVES

VFD – xD1000 Series

The **xD1000 Series** is a **general-purpose Variable Frequency Drive (VFD)** from **Lauritz Knudsen (LK)**. It is designed for reliable motor speed control in industrial and building automation applications such as pumps, fans, conveyors, compressors, and HVAC systems. because it includes built-in PID control, sleep/wake functionality, and auxiliary pump control for efficient HVAC and water system operation.



VFD – xD2000 Series

The **xD2000 Series** is a **high-performance utility Variable Frequency Drive (VFD)** from **Lauritz Knudsen (LK)**. It is designed for demanding applications such as **pumps, compressors, HVAC systems, water treatment plants, and industrial utilities**, providing advanced motor control, high efficiency, and energy savings.

Lauritz Knudsen (LK) DRIVES

VFD – xD3000 Series

The **xD3000 Series** is a **high-performance Variable Frequency Drive (VFD)** from **Lauritz Knudsen (LK)**. It is designed for **OEM machines and advanced industrial automation**, offering precise motor control, advanced motion functions, and built-in safety features.



VFD – xD4000 Series

The **xD1000 Series** is a **general-purpose Variable Frequency Drive (VFD)** from **Lauritz Knudsen (LK)**. It is designed for reliable motor speed control in industrial and building automation applications such as pumps, fans, conveyors, compressors, and HVAC systems. because it includes built-in PID control, sleep/wake functionality, and auxiliary pump control for efficient HVAC and water system operation.

Lauritz Knudsen (LK) DRIVES

VFD- Fx2000 series

The **Fx2000 Series** is a **high-performance industrial Variable Frequency Drive (VFD)** from **Lauritz Knudsen (LK)**. It is designed for **heavy-duty applications** requiring high starting torque, precise speed control, and advanced motor control. The Fx2000 supports both open-loop and closed-loop vector control, making it suitable for demanding industries such as cranes, winders, extruders, wire drawing, and conveyors.



Feature	xD1000	xD2000	xD3000	xD4000	Fx2000
Drive Type	General Purpose	Utility & Process	OEM Machine	Heavy Industrial	Heavy-Duty Industrial
Motor Control	V/F	Vector Control	Advanced Vector	Advanced Vector	V/F, Sensorless & Closed-Loop Vector
Motor Support	Induction Motor	IM + PMSM	IM + PMSM	IM + PMSM	IM + PMSM
Power Range	0.37–30 kW	Up to 160 kW	Up to 15 kW	Up to 315 kW (ND)	Up to 450 kW (ND)
Built-in PID	Yes	Advanced	Advanced	Advanced	Advanced
Pump Functions	Basic	Advanced	Limited	Advanced	Limited
Safe Torque Off (STO)	No	No	Yes	Yes (Dual STO)	Optional/Model dependent
Built-in EMC Filter	Basic	Yes	Yes	Yes	
Built-in DC Reactor	No	Yes	No	Yes	
Built-in Braking Transistor	Selected models	Selected models	Yes	Up to 160 kW	
Maximum Output Frequency	400 Hz	400 Hz	599 Hz	599 Hz	599 Hz
				Modbus RTU, Modbus TCP	

Lauritz Knudsen (LK) SOFT STARTER

SOFT STARTER - xS1000 Series

The xS1000 is a digital soft starter from Lauritz Knudsen (LK) Electrical & Automation. It is designed for the controlled starting and stopping of three-phase induction motors, reducing high starting current and minimizing mechanical stress on motors and driven equipment.



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Feature	xS1000	xS2000	xS3000	xS4000
Application Level	Basic	Standard	Advanced	Premium
Motor Control	Soft Start / Soft Stop	Soft Start / Soft Stop	Multiple Start & Stop Modes	Multiple Start & Stop Modes
Current Range	18–200 A	18–200 A	24–580 A	24–1250 A
Built-in Bypass	Yes	Yes	Yes	Yes (selected models support external bypass)
Display	LED Indicators	LED Indicators	Full Graphical LCD	Full Graphical LCD
USB Port	Optional	Optional	Yes	Yes
Parameter Backup	No	No	Yes	Yes
Event Logging	No	Limited	384 Events	384 Events
Real-time Graphs	No	No	Yes	Yes
Simulation Mode	No	No	Yes	Yes
Fire Mode	No	No	Yes	Yes
Power Through	No	No	Yes	Yes

Lauritz Knudsen (LK) PLC

High-performance **Programmable Logic Controller (PLC)** designed for industrial automation and space-constrained environments.

PLC – xP1000 Series

The **xP1000 Series** is an entry-level compact PLC from **Lauritz Knudsen (LK)** designed for small automation applications. It is suitable for standalone machines, small control panels, HVAC systems, pump control, and OEM equipment. It offers built-in digital I/O, serial communication, and expansion modules while maintaining a compact footprint



PLC – xP3000 Series

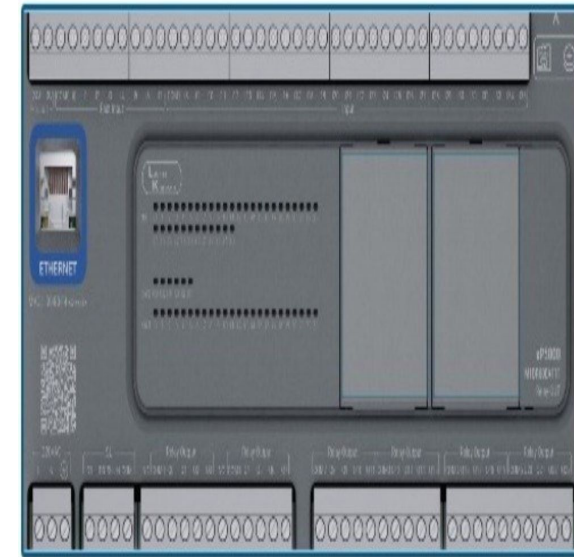
The **xP3000 Series** is a compact PLC from **Lauritz Knudsen (LK)** designed for small to medium industrial automation applications. It provides integrated I/O, expansion capability, and communication interfaces suitable for machine and process control.



Lauritz Knudsen (LK) PLC

PLC – xP5000 Series

The **xP5000 Series** is a **mid-to-high performance compact PLC** from **Lauritz Knudsen (LK)**. It is designed for machine automation and process control applications requiring faster processing, flexible I/O options, Ethernet communication, and motion control. It supports AC and DC powered CPU models, relay or transistor outputs, and expansion modules.



PLC – xP6000 Series

The **xP5000 Series** is a **mid-to-high performance compact PLC** from **Lauritz Knudsen (LK)**. It is designed for machine automation and process control applications requiring faster processing, flexible I/O options, Ethernet communication, and motion control. It supports AC and DC powered CPU models, relay or transistor outputs, and expansion modules.



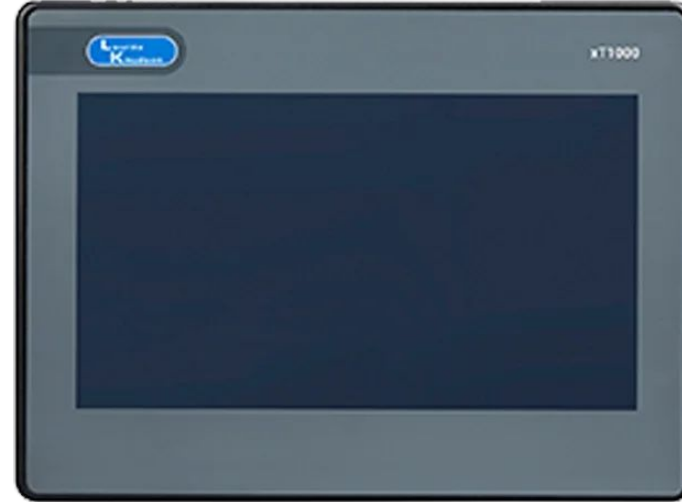
PLCs

Feature	xP1000	xP3000	xP5000	xP6000
PLC Type	Compact PLC	Expandable PLC	Advanced Expandable PLC	High-end PLC
Built –in-IO	16 I/O (8DI + 8DO)	16, 24, 32, 40 I/O	24, 32, 40, 60 I/O	Higher capacity than xP5000
Maximum I/O Capacity	Up to 40 I/O	Up to 112 I/O	Up to 196 I/O	Large-scale applications
Power Supply	AC/DC	24VDC	AC/DC	AC/DC
Communication Ports	1 × RS485, USB	RS232 + RS485, USB	Ethernet + Serial, USB	Multiple Ethernet & Communication Options
Expansion Modules	No	Up to 6 modules	Up to 4 expansions + 2 cartridges	Extensive expansion capability
High-Speed Counters	2 × 60 kHz	Yes	2 × 100 kHz	Higher performance
Pulse Outputs	No	Limited	2 × 100 kHz	Advanced motion control
RTC (Real Time Clock)	No	Yes	Yes	Yes
Memory Card	Micro SD	Micro SD	Micro SD	Micro SD

Lauritz Knudsen (LK) HMI

HMI - xT1000 Series HMI

The **LK xT1000 Series** is an **entry-level Human Machine Interface (HMI)** designed for machine automation and industrial process control. It provides an easy-to-use graphical interface for operators and communicates with PLCs, VFDs, energy meters, and other industrial devices using multiple communication protocols. It is programmed using **JMobile Studio**



HMI - xTE6000 Series HMI

The **LK xTE6000 Series** is an **enhanced industrial Human Machine Interface (HMI)** designed for medium and large automation systems. It offers improved processing performance, built-in Ethernet connectivity, advanced visualization, and extensive communication options. The xTE6000 is programmed using **JMobile Studio** and is suitable for machine automation, factory automation, process control, and building automation.



Lauritz Knudsen (LK) HMI

HMI - Xts6000 Series

The **xTS6000** is the **advanced HMI (Human Machine Interface)** series from **Lauritz Knudsen Electrical & Automation**. It is designed for machine automation, process control, factory automation, and building automation applications. Compared to the xTE6000 series, the xTS6000 offers enhanced hardware and a projected capacitive multi-touch display on supported models.



Feature	xT1000	xTE6000	xTS6000
Series Type	Standard HMI	Enhanced HMI	Advanced HMI
Display Sizes	4", 7", 10"	7", 10", 12", 15"	4", 7", 10", 12", 15"
Touch Technology	Resistive Touch	Resistive Touch	Projected Capacitive Multi-Touch
CPU Performance	Standard	Faster than xT1000	Highest performance
Ethernet	Optional (depends on model)	Standard	Standard (Dual Ethernet on selected models)
Serial Ports	RS-232/RS-485	RS-232/RS-485	RS-232/RS-485
USB	Yes	Yes	Yes
SD Card	Yes	Yes	Yes
Data Logging	Yes	Yes	Yes (better performance)
Recipe Management	Yes	Yes	Yes
Alarm & Trend	Yes	Yes	Yes
Custom Scripting	Limited	Yes	Advanced
Offline Simulation	Yes	Yes	Yes

EXOR PRODUCTS

HMI

eSMART Series – Basic and economical HMI

eX200 Series – Industrial touchscreen HMI

eX700 Series – Advanced HMI with IoT features

JSmart700 Series – High-performance industrial HMI

Mobile Series – Handheld wireless HMI devices



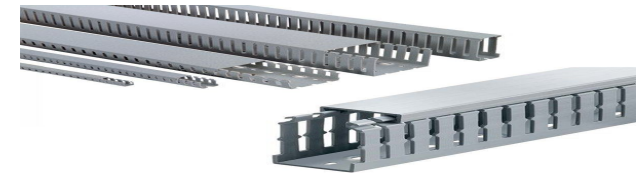
TRINITY TOUCH

Cable Glands and accessories



Din Rail and accessories

PVC Wiring Ducts and accessories



Industrial Plug and Socket

Industrial Panel Sockets
Industrial Plugs
Connectors



Interface Modules

4/8 Channel 2 C/O Relay module
Solid State Relay
Socket Relay
Diode o ring module

Enclosures

Thermoplastic Enclosures
FRP Enclosures
Aluminium Enclosures



Panel Manufacturing

PLC Panels

A **PLC (Programmable Logic Controller) panel** is an electrical control panel that houses a PLC and associated electrical components used to automate and control industrial machines or processes. It receives signals from field devices (inputs), processes them according to the PLC program, and controls output devices automatically.



PLC Panels
MCC Panels
VFD Panels
Distributed Control Panels
Metering Panels
APFC Panels

MCC PANEL

An **MCC (Motor Control Center) Panel** is an electrical control panel that contains motor starters, protection devices, control equipment, and power distribution components used to control and protect multiple electric motors from a single location. It is widely used in industries where several motors operate simultaneously, such as pumps, fans, compressors, conveyors, and process equipment.



