

# GLOBAL PUMP SOLUTION DOOCH

60Hz



## VARIABLE FREQUENCY DRIVE

ALL-IN-ONE INTELLIGENT PUMP CONTROLLER

# VARIABLE FREQUENCY DRIVE (V.F.D)

## ALL-IN-ONE INTELLIGENT PUMP CONTROL SYSTEM

**MOTOR-INDEPENDENT, MICROPROCESSOR BASED**  
**ENERGY SAVING PUMP CONTROL SYSTEM.**



**XQ-Drive**



**NSQ-Drive**



**SQ2-Drive**

	XQ-Drive	NSQ-Drive	SQ2-Drive
Single phase model	-	-	Available power : 1.1~2.2kW Input power : 1Phase, 200~230V Output power : 3Phase, 200~230V
Three phase model	Available power : 0.75~22kW Input power : 3Phase, 380~440V Output power : 3Phase, 380~440V	Available power : 0.75~22kW Input power : 3Phase, 380~440V Output power : 3Phase, 380~440V	-
Main frequency	50/60Hz	50/60Hz	50/60Hz
IP Class	IP55	IP55	IP55
Ambient temperature	-10~+40 C°	-10~+40 C°	-10~+40 C°
Connections	RS485 port	RS485 port (OPTION)	-
Pressure transmitter	4~20mA	4~20mA	4~20mA
Display	Graphic LCD type (3.5")	FND type (5 digits)	FND type (5 digits)
Built-in-devices	Built-in EMC filter (IEC61800-3) Built-in DC reactor	External (OPTION)	External (OPTION)

#### XQ-DRIVE

XQ-Drives are pump specific variable frequency drive that manage pump performance to match a wide range of system conditions and requirement.

Adjusting the pump speed is the most efficient means of controlling pump flow and reducing the energy consumption.

As the Drives are self-cooling and motor-independent structure, it can be mounted directly on the motor or on the wall.

#### Application

- Pressure boosting system
- Water treatment and processing
- HVAC applications
- Wash system
- Process water

#### Technical Specification

- Available power : 0.75~22kW
- Input power : 3Phase, 380~440V
- Output power : 3Phase, 380~440V
- Main frequency : 50/60Hz
- Maximum frequency : 60Hz
- IP Class : IP55
- Maximum distance of pressure transmitter from drive 10 meters
- Ambient temperature -10°C to 40°C
- Humidity 50% at 40°C and 90% at 20°C

#### Protections

- Dry running
- Low water level detection
- Minimum flow stop
- Over/under voltage
- Inverter over temperature
- Pressure setting
- Sensor failure
- Pump freezing
- Pump overload

#### Features

- New hardware design (LCD display type)
- Energy savings up to 70%
- Multipump control capability up to 6 pumps
- Control mode - pressure/differential pressure
- Hydraulic control functions included
- Electrical and hydraulic pump protections
- Automatic recovery after power failure
- Easy retrofitting on existing pump system
- Mounted directly on standard I.E.C. motors
- Flexible installation(motor, wall)
- Built-in EMC filter and DC reactor
  - Reduced noise and harmonic distortion

