



## **QS3 SERIES**



# CONTROL PANELS FOR 3 THREE PHASE MOTOR PUMPS STAR DELTA START WITH THERMAL PROTECTION

Three phase electromechanical control panel for three motor pumps.

#### TECHNICAL DATA

- Power supply 3 ~ 50/60Hz 400V ± 10%
- Main disconnecting switch with door lock
- Transformer for power supply of auxiliary circuits
- Contactor for each motor
- Timer changeover star delta star adjustable (0,1 ÷ 600s)
- Exchanger
- Protection degree IP 55

#### **INPUTS**

- No. 8 extra low voltage inputs for:
- Emergency stop SL / SP STOP (e.g, float switches for protection from dry operation), active in both AUTOMATIC and MANUAL modes
- Functional start and stop SL / SP 1 ÷ 3 (e.g.: control float switches) for each motor.
- Maximum level alarm SL / SP MAX
- Engine block due to temperature sensor tripping

#### **CONTROLS AND SIGNALS**

- Selector MANUAL-AUTOMATIC-OFF for each engine
- No. 7 indicator lights for the signaling of:
  - Presence of power supply
- Motor pump 1 ÷ 3 running
- Motor protection tripping 1 ÷ 3

#### **PROTECTION AND ALARMS**

- Thermal relay sensitive to the lack of phase internally resettable for each motor
- Motor protection fuses for each motor
- Protection fuses on the auxiliary circuits
- Alarm output 24Vac active in case of overload protection tripping or maximum level reached
- Engine block due to temperature sensor tripping

#### **OPERATING CONDITIONS**

- Ambient temperature -5 / +40°C
- Relative humidity 50% with maximum temperature 40°C

#### **NOTES**

- The power value is indicative in order for you to choose the correct control panel, make sure that the motor ampere absorption is included between the two operating current values of the control panel
- Housing made of metal (M) for all sizes

### **ELECTRICAL SPECIFICATION**

. EBARA PL	Model Three-phase 400V +10-15% - 50Hz	НР	kW	Nominal current [A]	Protection range ** [A]
	QTSE 30/12A-T-AR *	6	4	7,5÷12	4,5 ÷7,5
as bi	QTSE 30/16A-T-AR *	10	7,5	10÷16	6÷10
pap	QTSE 30/23A-T-AR *	12	9	15÷23	9÷15
regar	QTSE 3/28A-T-AR *	15	11	21÷28	13÷18
t pe	QTSE 30/36A -T-AR *	20	15	27÷36	17÷23
st no	QTSE 30/39A-T-AR *	22	18,5	33÷39	20÷25
Ē	QTSE 30/50A-T-AR *	30	22	38÷50	24÷32
atio	QTSE 30/60A-T-AR *	40	30	50÷60	32÷38
ğ	QTSE 30/78A-T-AR *	50,5	37	57÷78	35÷50
this	QTSE 30/100A-T-AR *	75	55	75÷100	46÷65
ts of	QTSE 30/130A-T-AR *	95,5	70	98÷130	60÷82
Juten	QTSE 30/195A-T-AR *	150	110	120÷195	75÷125

<sup>\*</sup> Star/Delta start

<sup>\*\* 58%</sup> of nominal current