

DESIGN ENVELOPE 6800Q | DUPLEX BOOSTER PACKAGES | (2 DUTY PUMPS OR 1 DUTY + 1 STANDBY PUMP) | SUBMITTAL

File No: 100.6111N
 Date: MAY 31, 2024
 Supersedes: NEW
 Date: NEW

Job: _____ Representative: _____
 _____ Order No: _____ Date: _____
 Contractor: _____ Submitted by: _____ Date: _____
 Engineer: _____ Approved by: _____ Date: _____

BOOSTER PACKAGE DESIGN DATA

Tag: _____ Model: _____
 Operation: 2 Duty 1 Duty + 1 Standby
 Total Flow: _____ L/s (m³/hr) Flow per Pump: _____ L/s (m³/hr)
 Suction (Supply) Pressure: _____ m (bar)
 NPSHr at Design: _____ m (bar)
 Boost Pressure (Head): _____ m (bar)
 Discharge Pressure: _____ m (bar)
 Total Installed Power: _____ kW
 Absorbed Power at Design: _____ kW
 Efficiency at Design: _____ %
 Liquid: Water Max Temperature: 65°C ± 2 (150°F ± 4)
 Other: _____ Max Temperature: _____ °F (°C)
 Specific Gravity: _____ Viscosity: _____ lbf*s/ft² (Pa*s)

NOTE: Test tolerance according to ISO 9906 Grade 2B
 ±8% on measured flow and ±5% on measured head

BOOSTER PACKAGE CONSTRUCTION DATA

Pump Type: 4700Q (Vertical Multi Stage)
Pump Construction: Full Stainless Steel
Piping Material: 304 Stainless Steel
Base & Stanchion Material: 304 Stainless Steel
Suction Valve Type:
 Ball Valve (less than DN50)
 Butterfly Valve (greater than or equal to DN50)
Discharge Valve Type:
 Check (NRV) + Ball Valve (less than DN50)
 Check (NRV) + Butterfly Valve (greater than or equal to DN50)
Suction Connection Orientation: Right Left
Discharge Connection Orientation: Right Left
System Connection Type: Flanged
Suction Flange Type: PN16
Discharge Flange Type: PN16
 PN25

MOTOR DATA

Motor Type (Efficiency): Induction (IE3)
 Permanent Magnet (IE5)
Voltage: 06: 400-415/3/50 03: 380/3/50
 05: 400/3/50 08: 440/3/50
Phase: 3 **Frequency:** 60 Hz **Enclosure:** TEFC

NOTE:
 • Booster electrical supply is 50Hz

DRIVE DATA

Drive Type: VFD (Induction Motors)
 ECM (Permanent Magnet Motors)
Enclosure: IP55
EMI/RFI Control: Integrated filter designed to meet EN61800-3
Harmonic Suppression: Integrated DC link reactors (in all VFDs and 112 frame Permanent Magnet Motors)
Cooling: Fan-cooled through back channel
Ambient temperature:
 -10°C to +45°C (-14°F to +113°F): Permanent Magnet models
 -10°C to +40°C (-14°F to +104°F): IVS models up to 1000m (3280 ft) above sea level

CONTROL PANEL DATA

CE labelled
 IP 54 Enclosure
 PLC Controlled
 4.3" Color Touchscreen
 Door Interlocked Main Disconnect
 MPCB (motor protection circuit breaker)
 Power on Indication
 Motor Run Indication
 Virtual Hand-Off-Auto (HOA) for each pump
 Flash Memory Storage
 Modbus RTU serial communication

CONTROLS CAPABILITIES**Safety Features:**

- High Suction Pressure Shutdown
- Low Suction Shutdown w/ Auto Restart
- End of Curve Protection
- Soft Fill Mode
- Emergency Power Mode

Conformance to ASHRAE 90.1 Section 10.4:

- No-flow shutdown
- Pressure setback mode

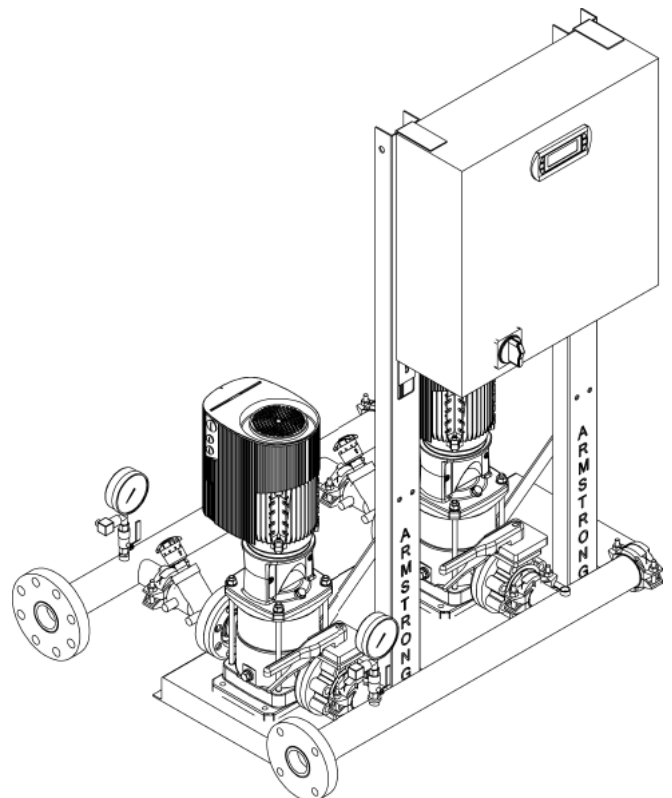
Convenience Features:

- Field Adjustable Set Points, Alarms and Timers
- Alternate Setpoints
- Auto Alternation of Pumps
- Minimal Run Timer
- Pump On Delay Timer
- Pump Switch Over (in case of lead pump failure)
- No-flow pressure optimization

OPTIONAL EQUIPMENT

BMS Communication Protocol: BACnet/IP
 BACnet MS/TP

- Low Suction Level Shutdown
- Float Switch
- Remote Pressure Transducer
- Redundant Pressure Transducer
- Certified Test Report



DESIGN ENVELOPE (PERMANENT MAGNET) CAPABILITY DATA

DESIGN ENVELOPE MODEL		VMS MODEL	POWER PER PUMP (kw)	MAX WORKING PRESSURE (bar)	MAX FLOW L/s (m ³ /hr)		MAX HEAD m (bar)	BEP EFFICIENCY (%)	MOTOR FRAME	DRIVER TYPE
DUTY-DUTY	DUTY-STANDBY				DUTY-DUTY	DUTY-STANDBY				
QPR-203040-XXD	QPR-103040-XXS	QVMS 03:04A	0.55	16	2.9 (10.3)	1.4 (5.1)	14.3 (1.4)	50.4%	90S	DEPM
QPR-203050-XXD	QPR-103050-XXS	QVMS 03:05A	0.75	16	2.9 (10.3)	1.4 (5.1)	17.9 (1.8)	50.4%	90S	DEPM
QPR-203080-XXD	QPR-103080-XXS	QVMS 03:08A	1.1	16	2.9 (10.3)	1.4 (5.1)	28.6 (2.8)	50.4%	90S	DEPM
QPR-203110-XXD	QPR-103110-XXS	QVMS 03:11A	1.5	16	2.9 (10.3)	1.4 (5.1)	39.3 (3.9)	50.4%	90S	DEPM
QPR-203170-XXD	QPR-103170-XXS	QVMS 03:17A	2.2	25	2.9 (10.3)	1.4 (5.1)	60.8 (6.0)	50.4%	90	DEPM
QPR-203230-XXD	QPR-103230-XXS	QVMS 03:23A	3	25	2.9 (10.3)	1.4 (5.1)	82.3 (8.1)	50.4%	90	DEPM
QPR-203250-XXD	QPR-103250-XXS	QVMS 03:25A	4	25	2.9 (10.3)	1.4 (5.1)	89.4 (8.8)	50.4%	90	DEPM
QPR-205020-XXD	QPR-105020-XXS	QVMS 05:02A	0.75	16	5.1 (18.5)	2.6 (9.3)	10.8 (1.1)	60.0%	90S	DEPM
QPR-205040-XXD	QPR-105040-XXS	QVMS 05:04A	1.1	16	4.9 (17.7)	2.5 (8.8)	19.6 (1.9)	60.0%	90S	DEPM
QPR-205050-XXD	QPR-105050-XXS	QVMS 05:05A	1.5	16	5.1 (18.5)	2.6 (9.2)	26.8 (2.6)	60.0%	90S	DEPM
QPR-205080-XXD	QPR-105080-XXS	QVMS 05:08A	2.2	16	4.9 (17.7)	2.5 (8.8)	39.3 (3.8)	60.0%	90	DEPM
QPR-205100-XXD	QPR-105100-XXS	QVMS 05:10A	3	16	5.1 (18.5)	2.6 (9.2)	53.5 (5.2)	60.0%	90	DEPM
QPR-205160-XXD	QPR-105160-XXS	QVMS 05:16A	4	25	4.7 (16.9)	2.3 (8.4)	71.4 (7.0)	60.0%	90	DEPM
QPR-205200-XXD	QPR-105200-XXS	QVMS 05:20A	5.5	25	4.9 (17.7)	2.5 (8.8)	98.2 (9.6)	60.0%	90	DEPM
QPR-210021-XXD	QPR-110021-XXS	QVMS 10:02-1A	0.75	16	8.0 (28.8)	4.0 (14.4)	10.8 (1.1)	62.7%	90S	DEPM
QPR-210020-XXD	QPR-110020-XXS	QVMS 10:02A	1.5	16	8.0 (28.8)	4.0 (14.4)	21.7 (2.1)	62.7%	90S	DEPM
QPR-210030-XXD	QPR-110030-XXS	QVMS 10:03A	2.2	16	8.0 (28.8)	4.0 (14.4)	32.5 (3.2)	62.7%	90	DEPM
QPR-210050-XXD	QPR-110050-XXS	QVMS 10:05A	3	16	7.5 (27.0)	3.7 (13.5)	47.5 (4.7)	62.7%	90	DEPM
QPR-210060-XXD	QPR-110060-XXS	QVMS 10:06A	4	16	7.9 (28.4)	3.9 (14.2)	63.3 (6.2)	62.7%	90	DEPM
QPR-210080-XXD	QPR-110080-XXS	QVMS 10:08A	5.5	16	8.0 (28.8)	4.0 (14.4)	86.7 (8.5)	62.7%	90	DEPM
QPR-210120-XXD	QPR-110120-XXS	QVMS 10:12A	7.5	25	7.6 (27.5)	3.8 (13.8)	118.8 (11.6)	62.7%	112	DEPM
QPR-210140-XXD	QPR-110140-XXS	QVMS 10:14A	11	25	8.0 (28.8)	4.0 (14.4)	151.7 (14.9)	62.7%	112	DEPM
QPR-215021-XXD	QPR-115021-XXS	QVMS 15:02-1A	2.2	16	14.9 (53.5)	7.4 (26.7)	12.7 (1.2)	64.4%	90	DEPM
QPR-215020-XXD	QPR-115020-XXS	QVMS 15:02A	4	16	14.9 (53.5)	7.4 (26.7)	25.3 (2.5)	64.4%	90	DEPM
QPR-215030-XXD	QPR-115030-XXS	QVMS 15:03A	5.5	16	14.9 (53.5)	7.4 (26.7)	38.0 (3.7)	64.4%	90	DEPM
QPR-215040-XXD	QPR-115040-XXS	QVMS 15:04A	7.5	16	14.9 (53.5)	7.4 (26.7)	50.6 (5)	64.4%	112	DEPM
QPR-215060-XXD	QPR-115060-XXS	QVMS 15:06A	11	16	14.9 (53.5)	7.4 (26.7)	76 (7.4)	64.4%	112	DEPM
QPR-215080-XXD	QPR-115080-XXS	QVMS 15:08A	15	25	14.6 (52.4)	7.3 (26.2)	97.4 (9.5)	64.4%	160M	DE IVS
QPR-215100-XXD	QPR-115100-XXS	QVMS 15:10A	18.5	25	14.6 (52.4)	7.3 (26.2)	121.7 (11.9)	64.4%	160L	DE IVS
QPR-220010-XXD	QPR-120010-XXS	QVMS 20:01A	2.2	16	17.8 (64.0)	8.9 (32.0)	14.0 (1.4)	63.0%	90	DEPM
QPR-220020-XXD	QPR-120020-XXS	QVMS 20:02A	4	16	17.0 (61.0)	8.5 (30.5)	25.5 (2.5)	63.0%	90	DEPM
QPR-220030-XXD	QPR-120030-XXS	QVMS 20:03A	5.5	16	16.2 (58.4)	8.1 (29.2)	35.1 (3.4)	63.0%	90	DEPM
QPR-220040-XXD	QPR-120040-XXS	QVMS 20:04A	7.5	16	16.4 (59.1)	8.2 (29.5)	47.8 (4.7)	63.0%	112	DEPM
QPR-220060-XXD	QPR-120060-XXS	QVMS 20:06A	11	25	16.2 (58.4)	8.1 (29.2)	70.1 (6.9)	63.0%	112	DEPM
QPR-220080-XXD	QPR-120080-XXS	QVMS 20:08A	15	25	16.6 (59.7)	8.3 (29.8)	97.5 (9.6)	63.0%	160M	DE IVS
QPR-220100-XXD	QPR-120100-XXS	QVMS 20:10A	18.5	25	16.5 (59.3)	8.2 (29.6)	120.3 (11.8)	63.0%	160L	DE IVS

Notes:

- 1 -xx(D or S) in the model number represents booster voltage.
400-415/3/50: -06(D or S)
380/3/50: -03(D or S)
400/3/50: -05(D or S)
440/3/50: -08(D or S)

Design Envelope (Permanent Magnet)
6800Q Duplex Booster Package

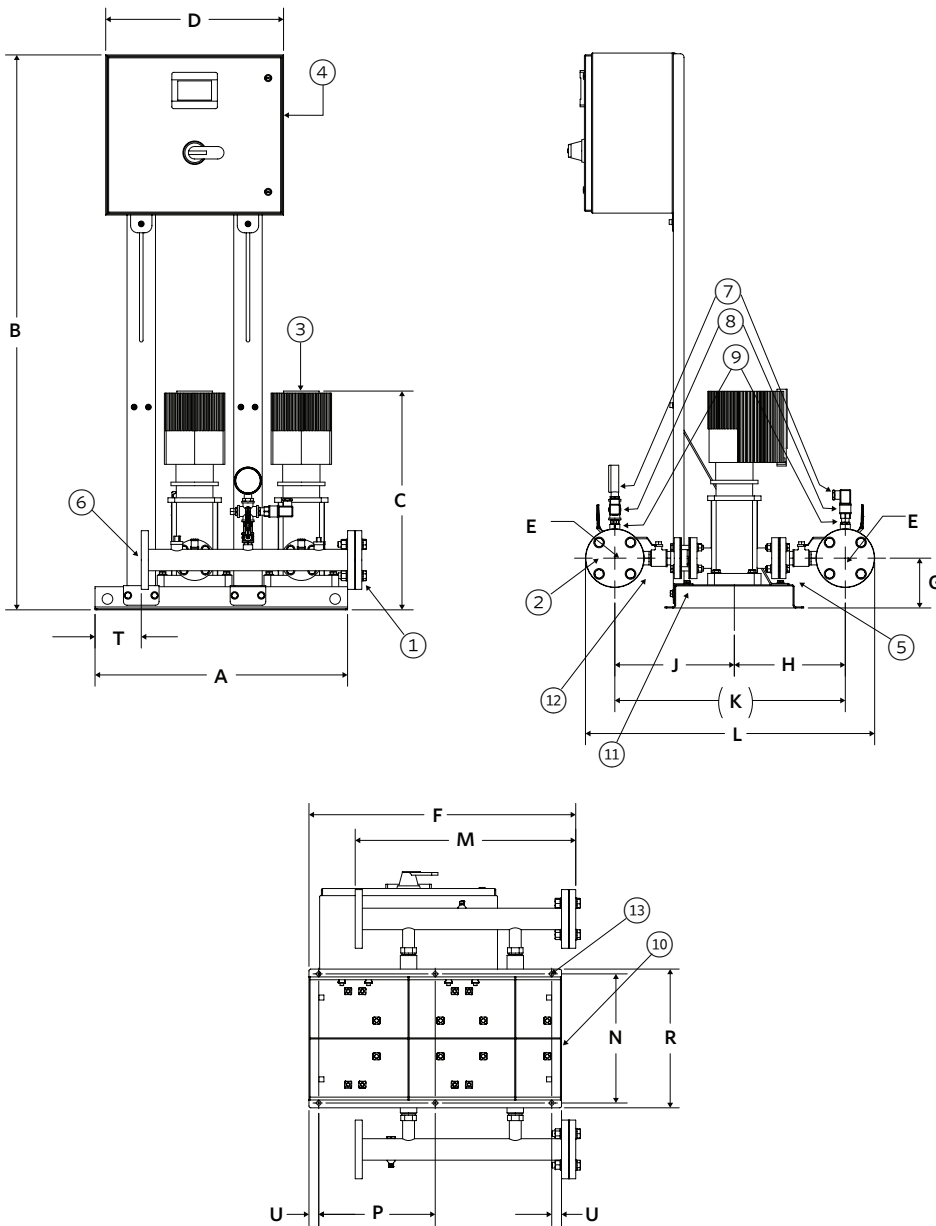
SUBMITTAL

4

DESIGN ENVELOPE (PERMANENT MAGNET) CAPABILITY DATA										
DESIGN ENVELOPE MODEL		VMS MODEL	POWER PER PUMP (kw)	MAX WORKING PRESSURE (bar)	MAX FLOW L/s (m ³ /hr)		MAX HEAD m (bar)	BEP EFFICIENCY (%)	MOTOR FRAME	DRIVER TYPE
DUTY-DUTY	DUTY-STANDBY				DUTY-DUTY	DUTY-STANDBY				
QPR-232011-XXD	QPR-132011-XXS	QVMS 32:01-1A	3	16	27.4 (98.7)	13.7 (49.4)	8.3 (0.8)	69.0%	90	DEPM
QPR-232010-XXD	QPR-132010-XXS	QVMS 32:01A	4	16	27.4 (98.7)	13.7 (49.4)	16.0 (1.6)	71.6%	90	DEPM
QPR-232022-XXD	QPR-132022-XXS	QVMS 32:02-2A	5.5	16	27.4 (98.7)	13.7 (49.4)	16.7 (1.6)	69.0%	90	DEPM
QPR-232032-XXD	QPR-132032-XXS	QVMS 32:03-2A	7.5	16	27.4 (98.7)	13.7 (49.4)	32.8 (3.2)	71.6%	112	DEPM
QPR-232042-XXD	QPR-132042-XXS	QVMS 32:04-2A	11	16	27.4 (98.7)	13.7 (49.4)	48.9 (4.8)	71.6%	112	DEPM
QVR-232052-XXD	QVR-132052-XXS	QVMS 32:05-2A	15	16	26.9 (96.8)	13.4 (48.4)	62.5 (6.1)	71.6%	160M	DE IVS
QVR-232060-XXD	QVR-132060-XXS	QVMS 32:06A	18.5	25	26.8 (96.6)	13.4 (48.3)	92.3 (9.1)	71.6%	160L	DE IVS
QVR-232082-XXD	QVR-132082-XXS	QVMS 32:08-2A	22	25	26.9 (96.9)	13.5 (48.5)	109.2 (10.7)	71.6%	180M	DE IVS
QVR-232102-XXD	QVR-132102-XXS	QVMS 32:10-2A	30	25	27.0 (97.4)	13.5 (48.7)	141.3 (13.9)	71.6%	200L	DE IVS
QPR-242011-XXD	QPR-142011-XXS	QVMS 42:01-1A	5.5	16	37.1 (133.7)	18.6 (66.9)	17.3 (1.7)	70.6%	90	DEPM
QPR-242010-XXD	QPR-142010-XXS	QVMS 42:01A	7.5	16	37.1 (133.7)	18.6 (66.9)	20.7 (2.0)	70.6%	112	DEPM
QPR-242022-XXD	QPR-142022-XXS	QVMS 42:02-2A	11	16	37.1 (133.7)	18.6 (66.9)	34.7 (3.4)	70.6%	112	DEPM
QVR-242020-XXD	QVR-142020-XXS	QVMS 42:02A	15	16	36.4 (131.1)	18.2 (65.6)	39.8 (3.9)	70.6%	160M	DE IVS
QVR-242030-XXD	QVR-142030-XXS	QVMS 42:03A	18.5	16	36.4 (131.1)	18.2 (65.6)	59.8 (5.9)	70.6%	160L	DE IVS
QVR-242042-XXD	QVR-142042-XXS	QVMS 42:04-2A	22	25	35.9 (129.3)	18.0 (64.6)	71.7 (7.0)	70.6%	180M	DE IVS
QVR-242050-XXD	QVR-142050-XXS	QVMS 42:05A	30	25	36.1 (129.9)	18.0 (64.9)	97.7 (9.6)	70.6%	200L	DE IVS
QVR-242060-XXD	QVR-142060-XXS	QVMS 42:06A	37	25	36.6 (131.7)	18.3 (65.8)	120.5 (11.8)	70.6%	200L	DE IVS
QVR-242070-XXD	QVR-142070-XXS	QVMS 42:07A	45	25	36.6 (131.9)	18.3 (65.9)	141.0 (13.8)	70.6%	225M/S	DE IVS
QPR-265011-XXD	QPR-165011-XXS	QVMS 65:01-1A	7.5	16	51.3 (184.5)	25.6 (92.3)	15.9 (1.6)	67.0%	112	DEPM
QPR-265010-XXD	QPR-165010-XXS	QVMS 65:01A	11	16	51.4 (185.1)	25.7 (92.6)	25.1 (2.5)	68.3%	112	DEPM
QVR-265022-XXD	QVR-165022-XXS	QVMS 65:02-2A	15	16	50.3 (180.9)	25.1 (90.5)	30.6 (3.0)	67.0%	160M	DE IVS
QVR-265020-XXD	QVR-165020-XXS	QVMS 65:02AE	18.5	16	49.9 (179.7)	25.0 (89.8)	47.2 (4.6)	68.3%	160L	DE IVS
QVR-265032-XXD	QVR-165032-XXS	QVMS 65:03-2A	22	16	50.5 (182.0)	25.3 (91.0)	55.4 (5.4)	68.2%	180M	DE IVS
QVR-265030-XXD	QVR-165030-XXS	QVMS 65:03A	30	16	50.7 (182.6)	25.4 (91.3)	73.1 (7.2)	68.3%	200L	DE IVS
QVR-265042-XXD	QVR-165042-XXS	QVMS 65:04-2A	37	16	50.5 (182.0)	25.3 (91.0)	79.9 (7.8)	68.2%	200L	DE IVS
QVR-265052-XXD	QVR-165052-XXS	QVMS 65:05-2A	45	16	50.5 (182.0)	25.3 (91.0)	104.5 (10.2)	68.2%	225M/S	DE IVS
QPR-285011-XXD	QPR-185011-XXS	QVMS 85:01-1A	11	16	68.6 (246.8)	34.3 (123.4)	8.2 (0.8)	65.2%	112	DEPM
QVR-285010-XXD	QVR-185010-XXS	QVMS 85:01A	15	16	67.1 (241.5)	33.5 (120.7)	19.4 (1.9)	66.4%	160M	DE IVS
QVR-285022-XXD	QVR-185022-XXS	QVMS 85:02-2A	18.5	16	67.2 (242)	33.6 (121)	15.8 (1.5)	65.3%	160L	DE IVS
QVR-285021-XXD	QVR-185021-XXS	QVMS 85:02-1A	22	16	67.5 (242.8)	33.7 (121.4)	27.8 (2.7)	64.8%	180M	DE IVS
QVR-285020-XXD	QVR-185020-XXS	QVMS 85:02A	30	16	67.5 (242.8)	33.7 (121.4)	39.2 (3.8)	66.4%	200L	DE IVS
QVR-285031-XXD	QVR-185031-XXS	QVMS 85:03-1A	37	16	67.5 (242.8)	33.7 (121.4)	47.5 (4.7)	64.8%	200L	DE IVS
QVR-285042-XXD	QVR-185042-XXS	QVMS 85:04-2A	45	16	67.6 (243.4)	33.8 (121.7)	54.9 (5.4)	65.1%	225M/S	DE IVS

Notes:

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 380/3/50: -03(D or S)
 400/3/50: -05(D or S)
 440/3/50: -08(D or S)



Duplex Booster Package

ITEM	DESCRIPTION
①	304 Stainless steel suction header
②	304 Stainless steel discharge header
③	Stainless Steel pump with integrated controls (IVS or DEPM)
④	Control Panel with PLC & Full Colour Touch HMI
⑤	Suction isolation valve
⑥	Flanged connections
⑦	Pressure gauge
⑧	Pressure transducer
⑨	Pressure gauge isolation valve
⑩	Stainless steel base and panel support
⑪	Discharge check (NRV) valve
⑫	Discharge isolation valve
⑬	6x12.50 bolting /AV mounting holes

Notes:

- 1 Standard right hand orientation illustrated
- 2 All pumps are the same

DESIGN ENVELOPE MODEL (DUTY-DUTY)	VMS MODEL (DUTY-STANDBY)	A*	B*	C**	D*	HEADER FLANGE RATING	HEADER SIZE E	F*	G*	H**	J**	K*	L*	M*	N**	P**	R**	T*	U*	WEIGHT kg
GPR-203040-XXD	QVMS 03:04A	710.0	1560.0	615.0	500.0	PN16	DN 50	750.0	140.0	312.0	336.0	648.0	813.0	620.0	363.0	327.5	390.0	130.0	27.5	191
GPR-203050-XXD	QVMS 03:05A	710.0	1560.0	643.0	500.0	PN16	DN 50	750.0	140.0	312.0	336.0	648.0	813.0	620.0	363.0	327.5	390.0	130.0	27.5	197
GPR-203080-XXD	QVMS 03:08A	710.0	1560.0	691.0	500.0	PN16	DN 50	750.0	140.0	312.0	336.0	648.0	813.0	620.0	363.0	327.5	390.0	130.0	27.5	201
GPR-203110-XXD	QVMS 03:11A	710.0	1560.0	761.0	500.0	PN16	DN 50	750.0	140.0	312.0	336.0	648.0	813.0	620.0	363.0	327.5	390.0	130.0	27.5	219
GPR-203170-XXD	QVMS 03:17A	710.0	1560.0	938.0	500.0	PN25	DN 50	752.0	140.0	312.0	336.0	648.0	813.0	622.0	363.0	327.5	390.0	130.0	27.5	241
GPR-203230-XXD	QVMS 03:23A	710.0	1560.0	1056.0	500.0	PN25	DN 50	752.0	140.0	312.0	336.0	648.0	813.0	622.0	363.0	327.5	390.0	130.0	27.5	261
GPR-203250-XXD	QVMS03:25A	710.0	1560.0	1092.0	500.0	PN25	DN 50	752.0	140.0	312.0	336.0	648.0	813.0	622.0	363.0	327.5	390.0	130.0	27.5	279
GPR-205020-XXD	QVMS 05:02A	710.0	1560.0	587.0	500.0	PN16	DN 50	750.0	140.0	338.5	368.5	707.0	872.0	620.0	363.0	327.5	390.0	130.0	27.5	193
GPR-205040-XXD	QVMS 05:04A	710.0	1560.0	651.0	500.0	PN16	DN 50	750.0	140.0	338.5	368.5	707.0	872.0	620.0	363.0	327.5	390.0	130.0	27.5	197
GPR-205050-XXD	QVMS 05:05A	710.0	1560.0	678.0	500.0	PN16	DN 50	750.0	140.0	338.5	368.5	707.0	872.0	620.0	363.0	327.5	390.0	130.0	27.5	211
GPR-205080-XXD	QVMS 05:08A	710.0	1560.0	838.0	500.0	PN16	DN 50	750.0	140.0	338.5	368.5	707.0	872.0	620.0	363.0	327.5	390.0	130.0	27.5	229
GPR-205100-XXD	QVMS 05:10A	710.0	1560.0	892.0	500.0	PN16	DN 50	750.0	140.0	338.5	368.5	707.0	872.0	620.0	363.0	327.5	390.0	130.0	27.5	251
GPR-205160-XXD	QVMS 05:16A	710.0	1560.0	1054.0	500.0	PN25	DN 50	752.0	140.0	338.5	368.5	707.0	872.0	622.0	363.0	327.5	390.0	130.0	27.5	273
GPR-205200-XXD	QVMS 05:20A	710.0	1560.0	1172.0	500.0	PN25	DN 50	752.0	140.0	338.5	368.5	707.0	872.0	622.0	363.0	327.5	390.0	130.0	27.5	312
GPR-210021-XXD	QVMS 10:02-1A	880.0	1560.0	668.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	223
GPR-210020-XXD	QVMS 10:02A	880.0	1560.0	678.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	239
GPR-210030-XXD	QVMS 10:03A	880.0	1560.0	777.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	255
GPR-210050-XXD	QVMS 10:05A	880.0	1560.0	847.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	273
GPR-210060-XXD	QVMS 10:06A	880.0	1560.0	877.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	291
GPR-210080-XXD	QVMS 10:08A	880.0	1560.0	957.0	500.0	PN16	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	324
GPR-210120-XXD	QVMS 10:12A	880.0	1560.0	1077.0	500.0	PN25	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	368
GPR-210140-XXD	QVMS 10:14A	880.0	1560.0	1303.0	500.0	PN25	DN 80	956.0	145.0	382.5	415.5	798.0	998.0	826.0	427.0	412.5	450.0	130.0	27.5	522
GPR-215021-XXD	QVMS 15:02-1A	880.0	1560.0	787.0	500.0	PN16	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	264
GPR-215020-XXD	QVMS 15:02A	880.0	1560.0	797.0	500.0	PN16	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	294
GPR-215030-XXD	QVMS 15:03A	880.0	1560.0	862.0	500.0	PN16	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	325
GPR-215040-XXD	QVMS 15:04A	880.0	1560.0	985.0	500.0	PN16	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	361
GPR-215060-XXD	QVMS 15:06A	880.0	1560.0	1163.0	500.0	PN16	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	520
GPR-215080-XXD	QVMS 15:08A	880.0	1560.0	1400.0	500.0	PN25	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	716
GPR-215100-XXD	QVMS 15:10A	880.0	1560.0	1490.0	500.0	PN25	DN 80	956.0	155.0	357.0	494.2	851.2	1051.2	826.0	565.0	412.5	588.0	130.0	27.5	819
GPR-220010-XXD	QVMS 20:01A	880.0	1560.0	787.0	500.0	PN16	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	262
GPR-220020-XXD	QVMS 20:02A	880.0	1560.0	797.0	500.0	PN16	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	294
GPR-220030-XXD	QVMS 20:03A	880.0	1560.0	862.0	500.0	PN16	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	327
GPR-220040-XXD	QVMS 20:04A	880.0	1560.0	985.0	500.0	PN16	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	369
GPR-220060-XXD	QVMS 20:06A	880.0	1560.0	1157.0	500.0	PN 25	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	520
GPR-220080-XXD	QVMS 20:08A	880.0	1560.0	1400.0	500.0	PN25	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	716
GPR-220100-XXD	QVMS 20:10A	880.0	1560.0	1490.0	500.0	PN25	DN 100	956.0	155.0	357.0	494.2	851.2	1086.2	826.0	565.0	412.5	588.0	130.0	27.5	821

Note: 1 Tolerances are

* ±25.40 mm
** ±12.70 mm
*** ±6.35 mm
2 Dimension are in mm.

3 -xx(d or s) in the model number represents booster voltage.

400-415/3/50: -06(d or s)
380/3/50: -03(d or s)
400/3/50: -05(d or s)
440/3/50: -08(d or s)

DESIGN ENVELOPE MODEL (DUTY-DUTY)	DESIGN ENVELOPE MODEL (DUTY-STANDBY)	VMS MODEL	A*	B*	C**	D*	HEADER FLANGE RATING	F*	G*	H**	J**	K*	L*	M*	N**	P**	R**	T*	U*	WEIGHT kg	
QPR-232011-XXD	QPR-132011-XXS	QVMS 32:01-1A	950.0	1560.0	895.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	355
QPR-232010-XXD	QPR-132010-XXS	QVMS 32:01A	950.0	1560.0	895.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	373
QPR-232022-XXD	QPR-132022-XXS	QVMS 32:02-2A	950.0	1560.0	965.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	408
QPR-232032-XXD	QPR-132032-XXS	QVMS 32:03-2A	950.0	1560.0	1113.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	448
QPR-232042-XXD	QPR-132042-XXS	QVMS 32:04-2A	950.0	1560.0	1288.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	601
QVR-232052-XXD	QVR-132052-XXS	QVMS 32:05-2A	950.0	1560.0	1505.0	500.0	PN16	DN 125	999.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	803
QVR-232060-XXD	QVR-132060-XXS	QVMS 32:06A	950.0	1560.0	1575.0	500.0	PN25	DN 125	1003.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	903
QVR-232082-XXD	QVR-132082-XXS	QVMS 32:08-2A	950.0	1560.0	1849.0	500.0	PN25	DN 125	1003.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	1183
QVR-232102-XXD	QVR-132102-XXS	QVMS 32:10-2A	950.0	1560.0	2044.0	500.0	PN25	DN 125	1003.0	170.0	395.0	538.2	933.2	1203.2	928.0	638.0	425.0	664.0	75.0	50.0	1321
QPR-242011-XXD	QPR-142011-XXS	QVMS 42:01-1A	1050.0	1560.0	951.0	500.0	PN16	DN 150	1099.0	205.0	457.5	630.7	1088.2	1373.2	974.0	724.0	475.0	750.0	125.0	50.0	438
QPR-242010-XXD	QPR-142010-XXS	QVMS 42:01A	1050.0	1560.0	951.0	500.0	PN16	DN 150	1099.0	205.0	457.5	630.7	1088.2	1373.2	974.0	724.0	475.0	750.0	125.0	50.0	470
QPR-242022-XXD	QPR-142022-XXS	QVMS 42:02-2A	1050.0	1560.0	1216.0	500.0	PN16	DN 150	1099.0	205.0	457.5	630.7	1088.2	1373.2	974.0	724.0	475.0	750.0	125.0	50.0	623
QVR-242020-XXD	QVR-142020-XXS	QVMS 42:02A	1050.0	1560.0	1363.0	500.0	PN16	DN 150	1099.0	205.0	457.5	630.7	1088.2	1373.2	974.0	724.0	475.0	750.0	125.0	50.0	811
QVR-242030-XXD	QVR-142030-XXS	QVMS 42:03A	1050.0	1560.0	1443.0	500.0	PN16	DN 150	1099.0	205.0	457.5	630.7	1088.2	1373.2	974.0	724.0	475.0	750.0	125.0	50.0	911
QVR-242042-XXD	QVR-142042-XXS	QVMS 42:04-2A	1050.0	1560.0	1657.0	500.0	PN25	DN 150	1105.0	205.0	457.5	630.7	1088.2	1388.2	974.0	724.0	475.0	750.0	125.0	50.0	1061
QVR-242050-XXD	QVR-142050-XXS	QVMS 42:05A	1050.0	1560.0	1792.0	500.0	PN25	DN 150	1105.0	205.0	457.5	630.7	1088.2	1388.2	974.0	724.0	475.0	750.0	125.0	50.0	1301
QVR-242060-XXD	QVR-142060-XXS	QVMS 42:06A	1050.0	1560.0	1858.0	500.0	PN25	DN 150	1105.0	205.0	457.5	630.7	1088.2	1388.2	974.0	724.0	475.0	750.0	125.0	50.0	1391
QVR-242070-XXD	QVR-142070-XXS	QVMS 42:07A	1050.0	1560.0	1960.0	500.0	PN25	DN 150	1105.0	205.0	457.5	630.7	1088.2	1388.2	974.0	724.0	475.0	750.0	125.0	50.0	1837
QPR-265011-XXD	QPR-165011-XXS	QVMS 65:01-1A	1050.0	1560.0	1029.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	500
QPR-265010-XXD	QPR-165010-XXS	QVMS 65:01A	1050.0	1560.0	1140.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	645
QVR-265022-XXD	QVR-165022-XXS	QVMS 65:02-2A	1050.0	1560.0	1340.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	833
QVR-265020-XXD	QVR-165020-XXS	QVMS 65:02AE	1050.0	1560.0	1366.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	1005
QVR-265032-XXD	QVR-165032-XXS	QVMS 65:03-2A	1050.0	1560.0	1587.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	1083
QVR-265030-XXD	QVR-165030-XXS	QVMS 65:03A	1050.0	1560.0	1640.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	1371
QVR-265042-XXD	QVR-165042-XXS	QVMS 65:04-2A	1050.0	1560.0	1709.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	1407
QVR-265052-XXD	QVR-165052-XXS	QVMS 65:05-2A	1050.0	1560.0	1812.0	500.0	PN16	DN 200	1101.0	205.0	469.0	692.2	1161.2	1501.2	976.0	638.0	475.0	750.0	125.0	50.0	1841
QPR-285011-XXD	QPR-185011-XXS	QVMS 85:01-1A	1100.0	1560.0	1039.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	647
QVR-285010-XXD	QVR-185010-XXS	QVMS 85:01A	1100.0	1560.0	1187.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	837
QVR-285022-XXD	QVR-185022-XXS	QVMS 85:02-2A	1100.0	1560.0	1340.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	933
QVR-285021-XXD	QVR-185021-XXS	QVMS 85:02-1A	1100.0	1560.0	1520.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	1077
QVR-285020-XXD	QVR-185020-XXS	QVMS 85:02A	1100.0	1560.0	1670.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	1311
QVR-285031-XXD	QVR-185031-XXS	QVMS 85:03-1A	1100.0	1560.0	1660.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	1399
QVR-285042-XXD	QVR-185042-XXS	QVMS 85:04-2A	1100.0	1560.0	1770.0	600.0	PN16	DN 200	1151.0	205.0	505.5	728.7	1234.2	1574.2	1026.0	724.0	475.0	750.0	125.0	50.0	1833

Note:

1 Tolerances are

* ±25.40 mm

** ±12.70 mm

*** ±6.35 mm

2 Dimension are in mm.

3 -xx(d or s) in the model number represents booster voltage.

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