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Energy Recovery, Inc.
Technical Data Sheet
CPXP 30

REV	BY	CKD	REVISION	DATE
00	SYB	EK	Initial Release	11/20/2025

Sheet
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Document number:
81011-01

DESCRIPTION:
TECHNICAL DATA SHEET
CPXP 30 High-Pressure Pump

1. Part number 81011-01		2. Service SWRO		3. Reference		
OPERATING CONDITIONS	1	Medium	Seawater	37	Flow -Pressure Curve	See Pump Curve Doc# 81041-01
	2	Operating Temperature	35.6°F-122°F (2-50°C)	38	Flow-Speed Curve	See Pump Curve Doc# 81041-01
	3	Operating State	Continuous	39	Shaft Power-Pressure Curve	See Pump Curve Doc# 81041-01
	4	Medium Characteristics	Corrosive	40		
	5	Specific Gravity	1030 kg/m ³	41	Shaft / Shell / Wetted Metals	2507
	6	Viscosity	1.060 cP @ 70°F (21.1°C)	42	Shaft Coupling	Galv. Steel w/ Zn-Ni Alloy
	7	Filtration Requirement*	10 µm	43	Gaskets	FKM
	8			44	Mechanical Seal	Hastelloy Alloy
PUMP PERFORMANCE	9	Geometric Displacement	80 cm ³ /rev	45	Fasteners	2507
	10	Max Outlet Pressure	1200 psi (83 bar)	46	Required Motor Power* *	Refer to pump calculation results
	11	Min Outlet Pressure	290 psi (20 bar)	47	Motor Technical Details	Refer to Motor TDS document
	12	Inlet Pressure	29-72.5 psi (2-5 bar)	48		
	13	Min Speed	700 rpm	49	Space Heater/Fungus Proof/Tropicalization	Optional
	14	Max Speed	1,800 rpm	50	Thermal Protection	Optional
	15	Rated Flow@1500rpm&80bar	6.8 m ³ /h	51		
	16	Flow Control	Speed Regulated	52		
PUMP DESIGN	17	Inlet	M42X1.5 (DN 40) Female Thread	53	Shipping Dimensions & Weight	See Packaging Drawing Doc# 92511-01
	18	Outlet	M42X1.5 (DN 40) Female Thread	54		
	19	Inlet & Outlet Piping Connections	Grooved-End Flexible Coupling DN40 (Optional)	55		
	20	Discharge High-Pressure Flexible Hose	DN40, 1m (Optional)	57		
	21	Pump Base	NO	58	Scope of Supply	Pump Head, Motor, Bell Housing, Shaft Coupling. (Optional: Inlet Joint, Outlet Check Valve, Discharge High-Pressure Flexible Hose)
	22	Internal Intergrated Flushing Valve	YES	59		
	23	Sealing Cooling Method	Self-cooling	60		
	24	Bearing Lubrication Method	Self-lubricating	61		
25	Rotation Direction	Clockwise (viewed from the motor towards the pump head)	62	INSPECTION & TESTS	Material Conformance	Material Certificate
26			63		Dimensional and Visual Inspection	Certified Drawing
27			64		External Leakage Test	Test Reports
28			65		Performance Test	Test Reports
29			66		Shipping Authorization	Client Shipment Release
30			67			
31			68			
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33			70			
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36			73			

NOTES:

* ERI recommends to use a precision depth filter cartridge with efficiency of 99.98% at 10 micron and β10>5000 to protect the key components of the pump. Bag filters or string-wound filter cartridges are not recommended.

** The required motor power depends on your flow rate and pressure. Please contact ERII for accurate motor power information.

PRICE: sales@energyrecovery.com		
MANUFACTURER: Energy Recovery, Inc	MODEL: CPXP 30	