

3.8 A&R Winch

Offshore pipe-laying winch, which is called abandonment & Recovery winch or drawing in and drawing out winch, is one of the key parts of lay barge AR system. Lay barge carry out pipe laying operation of oil & gas transmission under water by AR system. The main function of A&R winch is abandonment, recovery, emergency and ship towing. Winch consists of motor, drum, winch frame, wireline guide, gear reducer, gear and control system. Now, CNPC can produce electric drive the single drum A&R Winch, load capacity less than 250T.

Technical Features

- AC VFD drive, stepless speed, operational stability, less impact .
- Combined transmission by hard gear surface open gear and epicyclic gear box, compact structure and less floor space.
- Disk brake with failure protection and safety protection in case of accident.
- Mechanical braking mechanism, ensure the equipment stability and safety while towing operation.
- Fulfill the winch hovering, brake by dynamic brake.
- Independent AC VFD drive wireline guide, active rope guide, program control and automatic adjustment.

Technical Parameter

Winch model	AR-100DB	AR-250DB
Drive mode	AC VFD 440VAC 60Hz	AC VFD 690VAC 60Hz
Ambient temperature, °C	0 ~ 45	-10 ~ 45
Moisture	≤90%	≤90%
Max. continuous pull force , kN	1000	2500
Rated wireline speed, m/min	20	20
Dia. Of wireline, mm	64	90
Drum capacity, m	700	1600
Motor No. × Power, kW	2 × 230	3 × 375
Brake force, kN	1140	2750
Motor for wireline guide, kW	4	11
Protection class	IP55	IP55
Overall dimension, mm	4982 × 3580 × 2845	6402 × 5568 × 4015
Weight (wireline weight excluded) ,kg	33 (approximate)	98 (approximate)

