Technical Specifications and Trial Directives of Power Ascender and Descender

S.No	Parameters	Technical Specifications	Trial Directives
1.	**General**	Battery-operated rope ascender descender suitable to provide safe and secure access to heights.	
2.	**Ruggedness**	IP 54 or better	BOO to check and verify the parameter through OEM certificate.
3.	**Battery**	Lithium ion rechargeable minimum 24 V 6 AH Battery	BOO to check and verify the parameter through OEM certificate.
4.	**Rope Diameter**	Compatible with 10.5-12 mm Static Rope	BOO to physically check and verify the parameter.
5.	**Weight**	Maximum 20 kg including battery	BOO to physically check and verify the parameter.
6.	**Lifting Capacity**	Minimum 180 Kg	BOO to physically check and verify the parameter.
7.	**Control Features**	Should be easy to operate and come with both the manual and remote control feature.	BOO to check and verify the parameter through OEM certificate.
8.	**Battery Pack & Load-Lift Capability**	Battery should operate for 200 mtr on a single charge with minimum 180 Kg	BOO to physically check and verify the parameter. (BOO to check on 20 mtr vertical wall by lifting (20 mtr X 10 times)
9.	**Ascending Speed**	Ascending:- Maximum speed should be 0.5 ft/sec and above	BOO to physically check and verify the parameter.
10.	**Safety Features**	It should enable safety features with respect to slipping of the rope	BOO to physically check and verify the parameter.
11.	**Temperature Range**	-10degC to +45degC	BOO to check and verify the parameter through OEM certificate.

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12.	**Holding Capability**	The power ascender descender should be able to hold positions at a particular height and be capable of controllable descent with a switched off / discharged battery	BOO to physically check and verify the parameter.
13.	**Temperature sensor**	Temperature sensor should shut down the motor in event of overheating.	BOO to check and verify the parameter through OEM certificate.
14.	**Auto-Brake Mechanism**	Auto braking in hands off position should provide for emergency stop	BOO to physically check and verify the parameter.
15.	**Motor Direction Control**	Should have forward reverse power control	BOO to physically check and verify the parameter.
16.	**Training**	Both operational and maintenance training will be provided by the Vendor.	BOO to check and verify the parameter through OEM certificate.
17.	**Technical Literature**	One set of English technical literature will be provided with each equipment.	BOO to physically check and verify the parameter.
18.	**Certification**	CE/EN/ISO/IS Certified	BOO to check and verify the parameter through relevant certificate.
19.	**Accessories**	i. Battery-01 Main, 01 spare ii. Battery charger iii. Static Rope (EN-1891)-100 Mtr	BOO to physically check and verify the parameter.
20.	**Warranty**	Minimum 1 year	BOO to check and verify the parameter through relevant certificate.
21.	**Spare Part and Service Support**	5 years	BOO to check and verify the parameter through relevant certificate.

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