



OptiDrive VSD

Intelligent Variable Speed and Torque Solution for AFCs
4160 volt technical specifications



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Product range								
OptiDrive type	Voltage (V)	Power (kW / hp)	Current	Torque (Nm / lb ft)	Length (mm / in)	Width (mm / in)	Height (mm / in)	Weight (kg / lbs)
VSD41-500-65	4160	500 / 670	87A	2650 / 1955	2590 / 102.0	1000 / 39.4	1225 / 48.2	9500 / 20950
VSD41-630-65	4160	630 / 845	99A	3340 / 2465	2850 / 112.2	950 / 37.4	1450 / 57.1	9500 / 20950
VSD41-850-78	4160	850 / 1140	130A	4510 / 3325	2850 / 112.2	950 / 37.4	1450 / 57.1	10500 / 23150
VSD41-1200-78	4160	1200 / 1600	185A	6060 / 4470	2850 / 112.2	950 / 37.4	1450 / 57.1	11000 / 24250
VSD41-1600-78	4160	1600 / 2150	250A	8540 / 6300	3090 / 121.6	950 / 37.4	1450 / 57.1	13000 / 28660



OptiDrive VSD

VSD41-500-65

4160 volts, 670 hp



Parameter	
Nominal power	670 hp
Nominal voltage	4160 VAC (+10 .. -20%)
Nominal current	87 A
Nominal torque	1,955 ft-lbs
Maximum torque	4,300 ft-lbs
Nominal speed	1800 rpm
Maximum speed	2100 rpm
Efficiency including convertor	93%
Insulation class	H
Operating mode	Continuous duty (S9)
Standard	Certified and flameproof (XP)
Total weight	20,950 lbs
Lubricant type	Synthetic grease
Re-greasing interval	3,000 hours

Convertor

Type	Voltage sourced
Controller type	Flux vector
Auxiliary voltage	110 / 230 VAC (+10 .. -20%)
Auxiliary power	200 VA

Cooling system

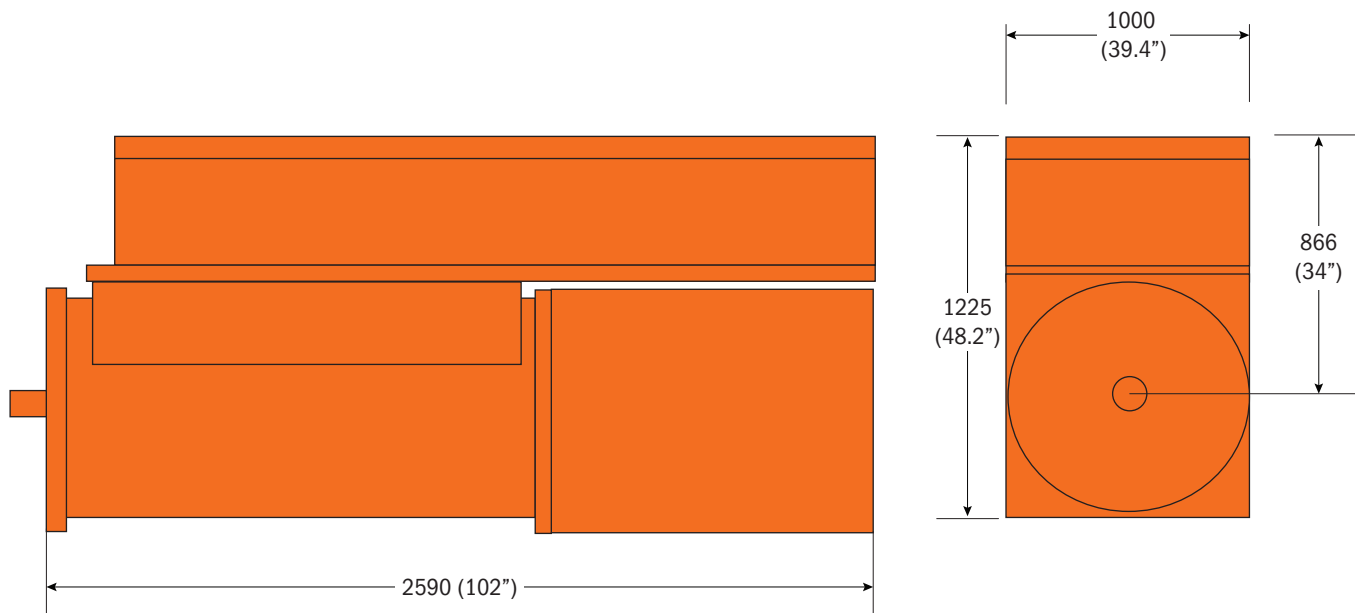
Type	Water cooled
Nominal flow	5.3 gal/min
Maximum operating pressure	290 psi
Maximum inlet water temperature	104°F
Over-pressure relief valve	435 psi

Temperature monitoring

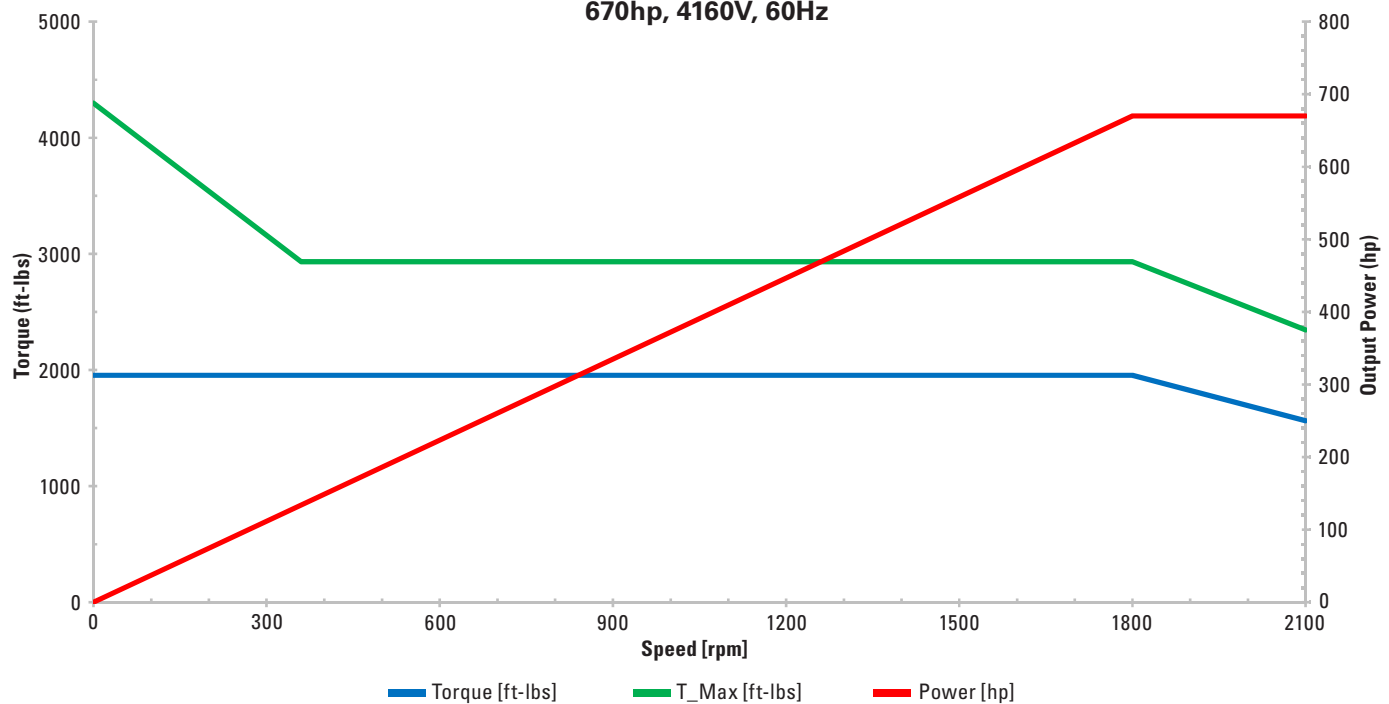
Motor	Stator and bearings
Converter	IGBT modules and power choke

Connector system

Main power	Cable gland or plug and socket to suit application and region
Auxiliary power	Cable gland or plug and socket to suit application and region



Torque Diagram VSD41-500-65
670hp, 4160V, 60Hz



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OptiDrive VSD

VSD41-630-65

4160 volts, 845 hp



Parameter	
Nominal power	845 hp
Nominal voltage	4160 VAC (+10 .. -20%)
Nominal current	99 A
Nominal torque	2,465 ft-lbs
Maximum torque	5,423 ft-lbs
Nominal speed	1800 rpm
Maximum speed	2100 rpm
Efficiency including convertor	93%
Insulation class	H
Operating mode	Continuous duty (S9)
Standard	Certified and flameproof (XP)
Total weight	20,950 lbs
Lubricant type	Synthetic grease
Re-greasing interval	3,000 hours

Convertor

Type	Voltage sourced
Controller type	Flux vector
Auxiliary voltage	110 / 230 VAC (+10 .. -20%)
Auxiliary power	200 VA

Cooling system

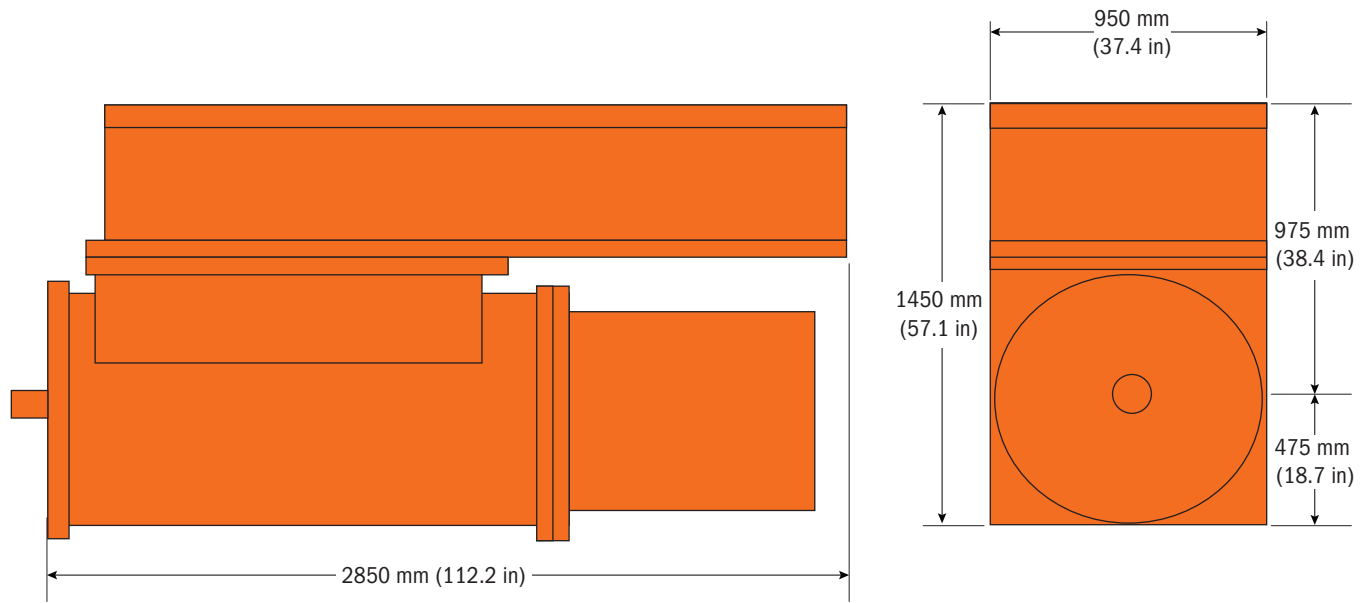
Type	Water cooled
Nominal flow	5.3 gal/min
Maximum operating pressure	290 psi
Maximum inlet water temperature	104°F
Over-pressure relief valve	435 psi

Temperature monitoring

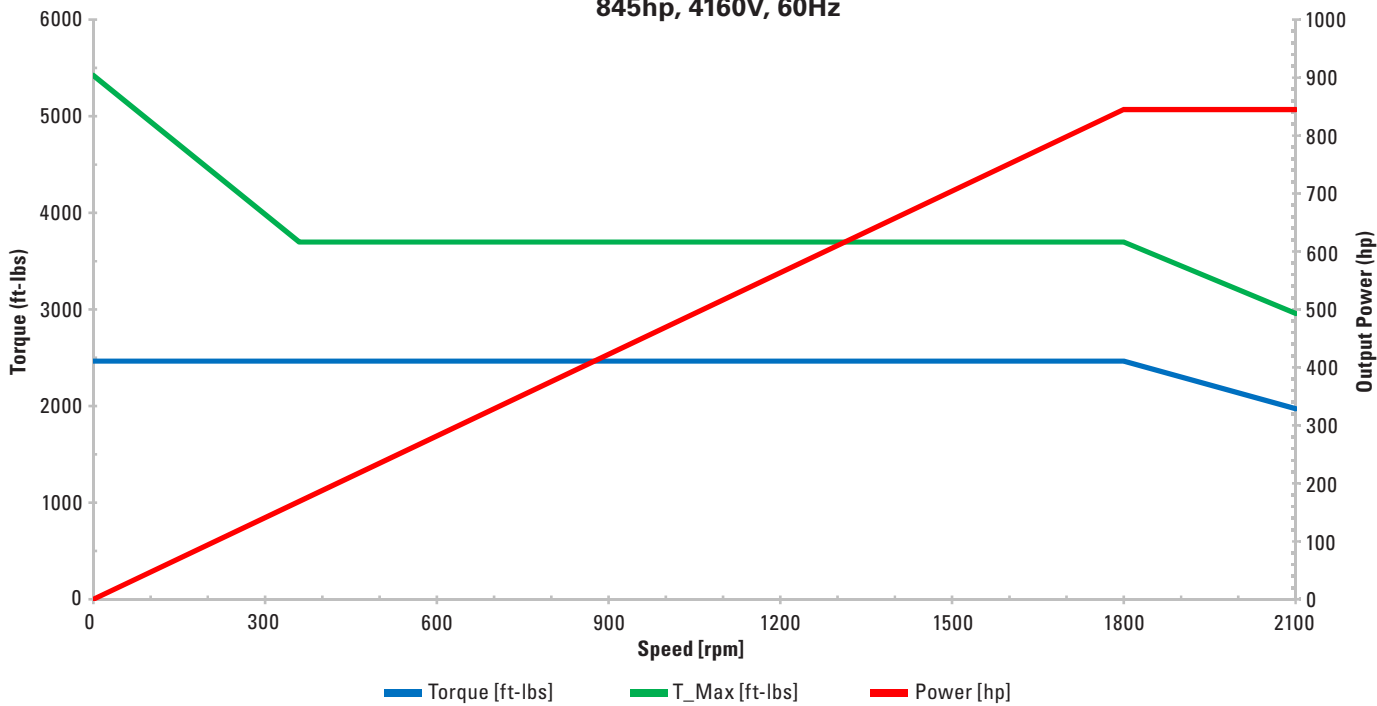
Motor	Stator and bearings
Converter	IGBT modules and power choke

Connector system

Main power	Cable gland or plug and socket to suit application and region
Auxiliary power	Cable gland or plug and socket to suit application and region



**Torque Diagram VSD41-630-65
845hp, 4160V, 60Hz**



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OptiDrive VSD

VSD41-850-78
4160 volts, 1140 hp



Parameter	
Nominal power	1140 hp
Nominal voltage	4160 VAC (+10 .. -20%)
Nominal current	130 A
Nominal torque	3,325 ft-lbs
Maximum torque	7,315 ft-lbs
Nominal speed	1800 rpm
Maximum speed	2100 rpm
Efficiency including convertor	93%
Insulation class	H
Operating mode	Continuous duty (S9)
Standard	Certified and flameproof (XP)
Total weight	23,150 lbs
Lubricant type	Synthetic grease
Re-greasing interval	3,000 hours

Convertor

Type	Voltage sourced
Controller type	Flux vector
Auxiliary voltage	110 / 230 VAC (+10 .. -20%)
Auxiliary power	200 VA

Cooling system

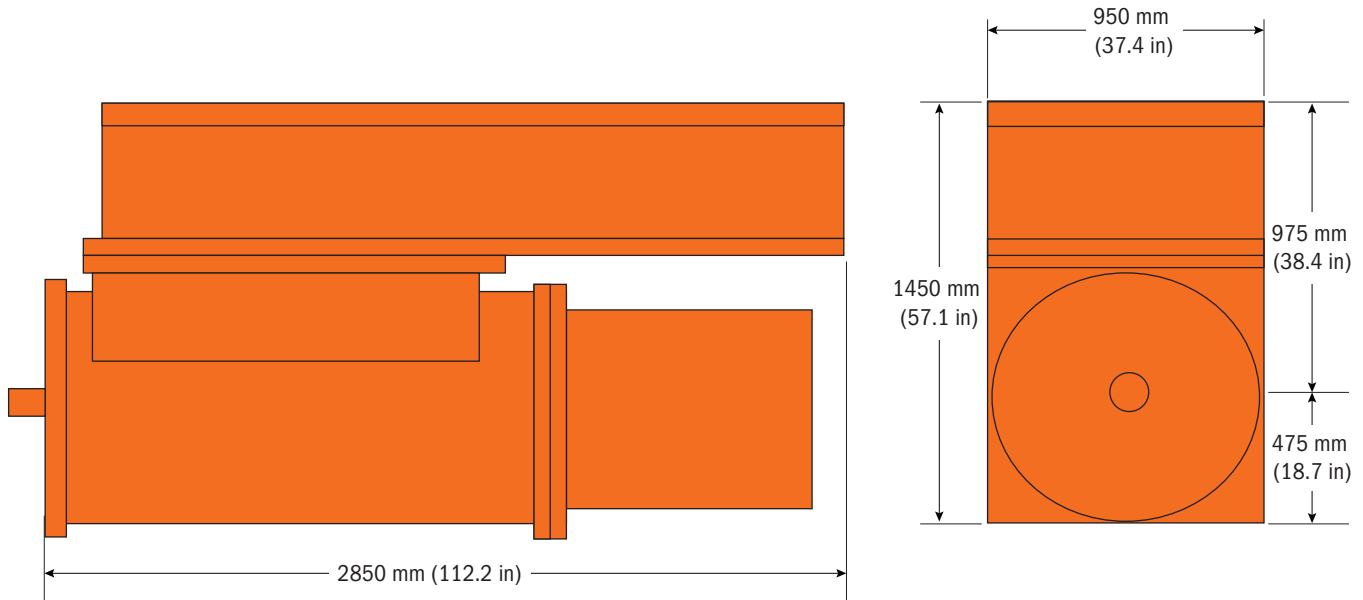
Type	Water cooled
Nominal flow	6.6 gal/min
Maximum operating pressure	290 psi
Maximum inlet water temperature	104°F
Over-pressure relief valve	435 psi

Temperature monitoring

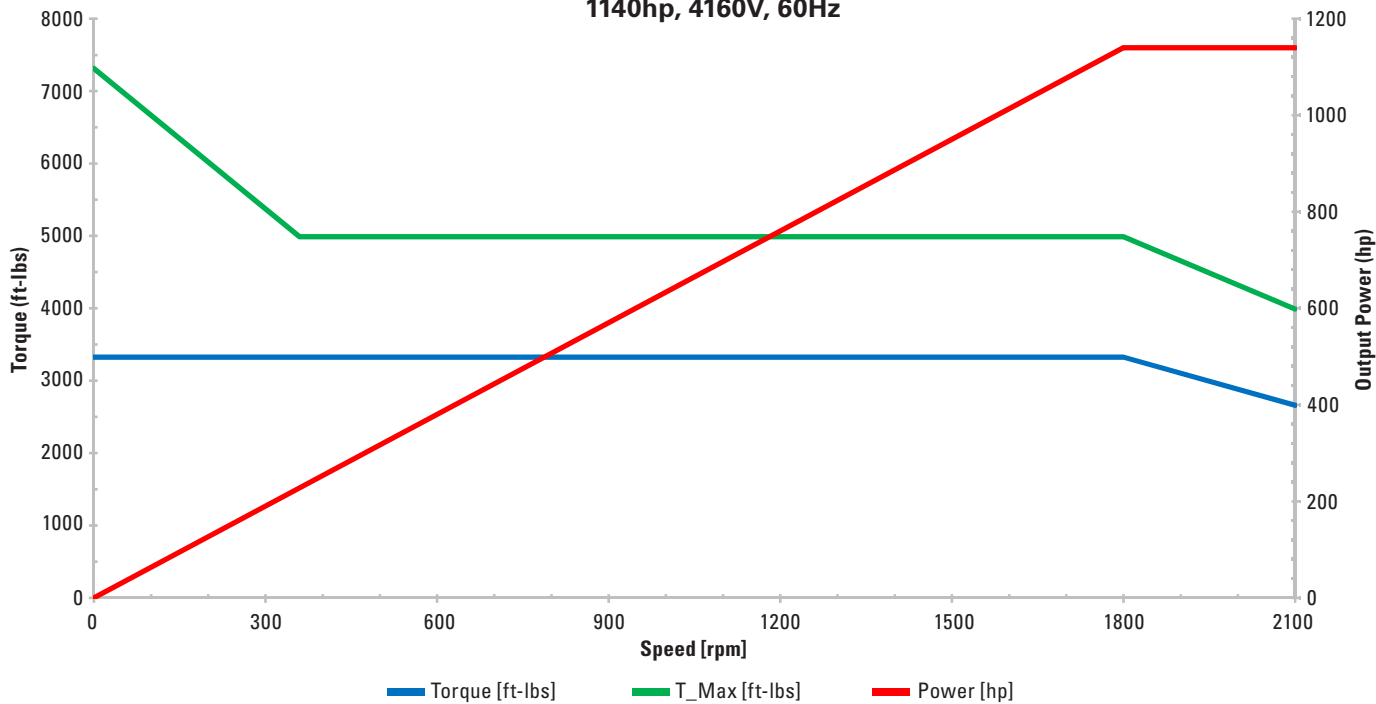
Motor	Stator and bearings
Converter	IGBT modules and power choke

Connector system

Main power	Cable gland or plug and socket to suit application and region
Auxiliary power	Cable gland or plug and socket to suit application and region



Torque Diagram VSD41-850-78
1140hp, 4160V, 60Hz



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OptiDrive VSD

VSD41-1200-78
4160 volts, 1600 hp



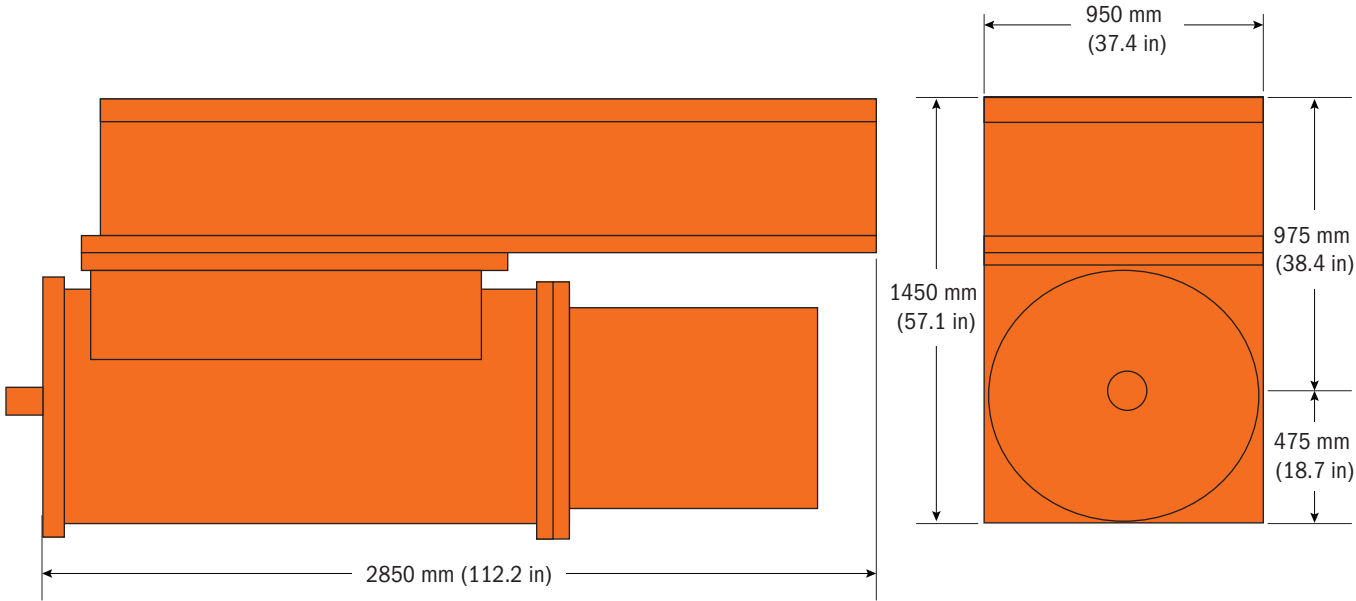
Parameter	
Nominal power	1600 hp
Nominal voltage	4160 VAC (+10 .. -20%)
Nominal current	185 A
Nominal torque	4,470 ft-lbs
Maximum torque	9,835 ft-lbs
Nominal speed	1800 rpm
Maximum speed	2100 rpm
Efficiency including convertor	93%
Insulation class	H
Operating mode	Continuous duty (S9)
Standard	Certified and flameproof (XP)
Total weight	24,250 lbs
Lubricant type	Synthetic grease
Re-greasing interval	3,000 hours

Convertor	
Type	Voltage sourced
Controller type	Flux vector
Auxiliary voltage	110 / 230 VAC (+10 .. -20%)
Auxiliary power	200 VA

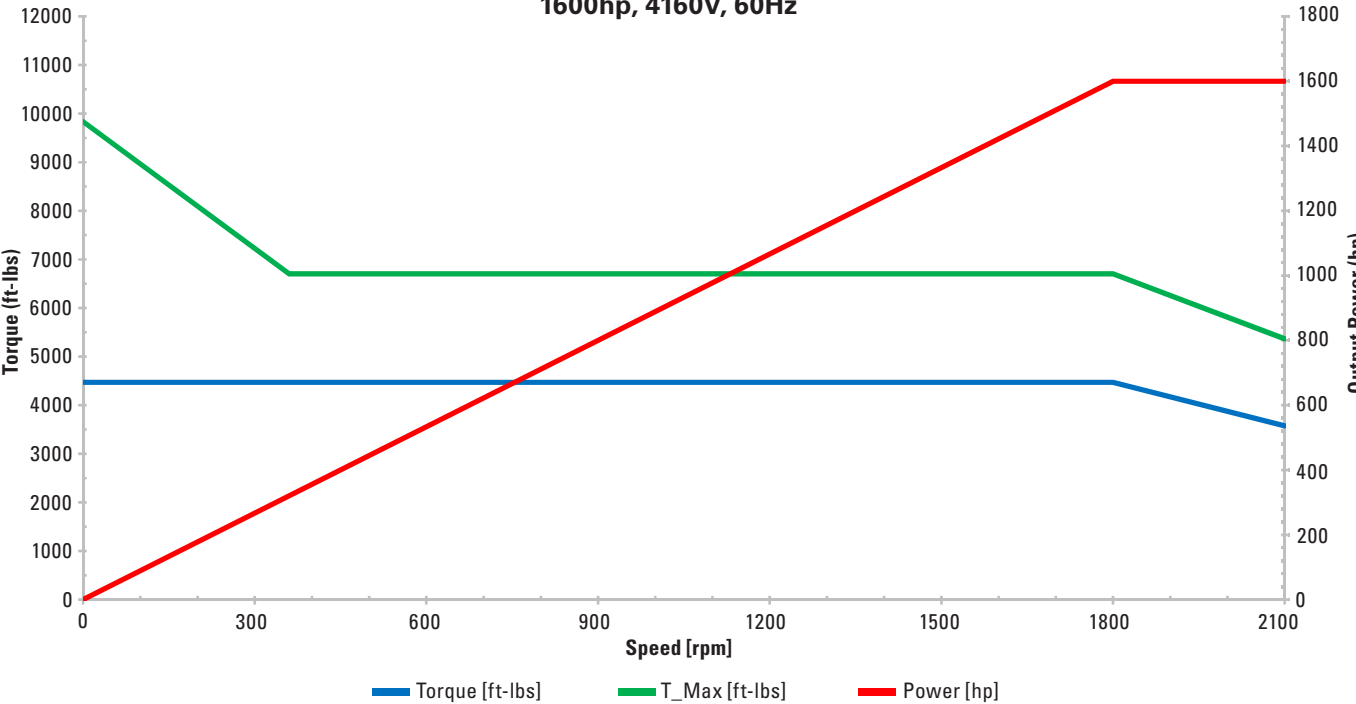
Cooling system	
Type	Water cooled
Nominal flow	7.9 gal/min
Maximum operating pressure	290 psi
Maximum inlet water temperature	104°F
Over-pressure relief valve	435 psi

Temperature monitoring	
Motor	Stator and bearings
Converter	IGBT modules and power choke

Connector system	
Main power	Cable gland or plug and socket to suit application and region
Auxiliary power	Cable gland or plug and socket to suit application and region



Torque Diagram VSD41-1200-78
1600hp, 4160V, 60Hz



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OptiDrive VSD

VSD41-1600-78
4160 volts, 2150 hp



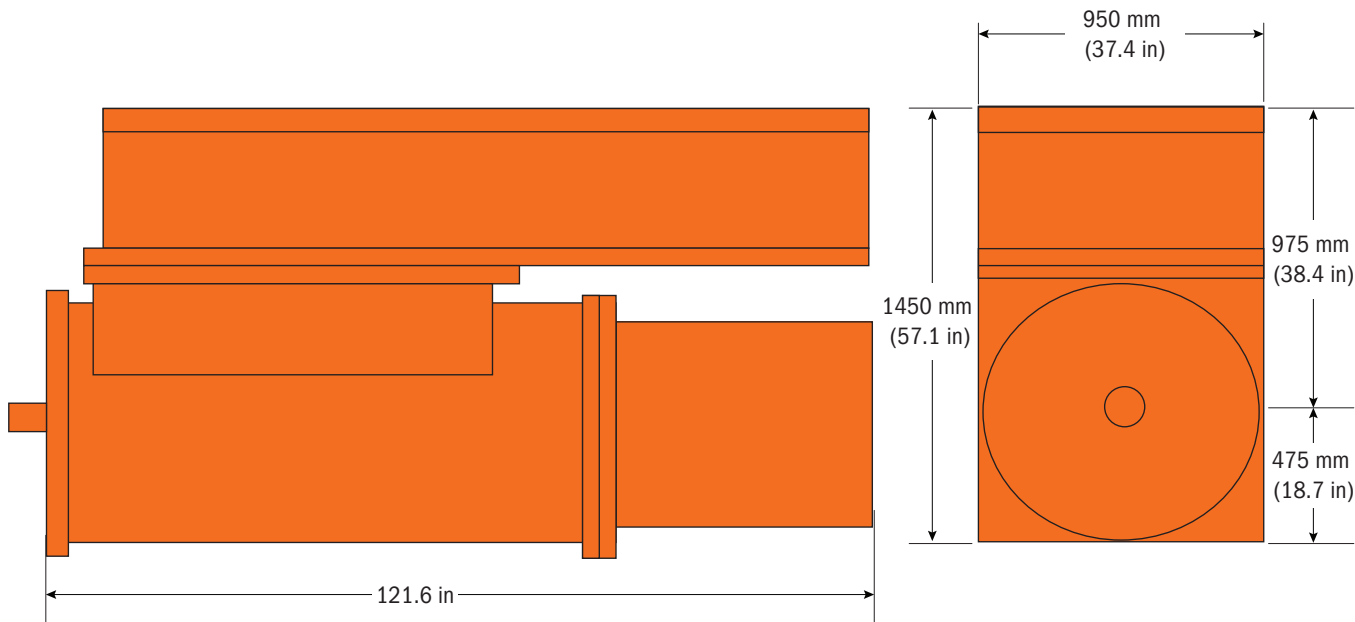
Parameter	
Nominal power	2150 hp
Nominal voltage	4160 VAC (+10 .. -20%)
Nominal current	250 A
Nominal torque	6,300 ft-lbs
Nominal torque	13,870 ft-lbs
Nominal speed	1800 rpm
Maximum speed	2100 rpm
Efficiency including convertor	93%
Insulation class	H
Operating mode	Continuous duty (S9)
Standard	Certified and flameproof (XP)
Total weight	28,66 lbs
Lubricant type	Synthetic grease
Re-greasing interval	3,000 hours

Convertor	
Type	Voltage sourced
Controller type	Flux vector
Auxiliary voltage	110 / 230 VAC (+10 .. -20%)
Auxiliary power	200 VA

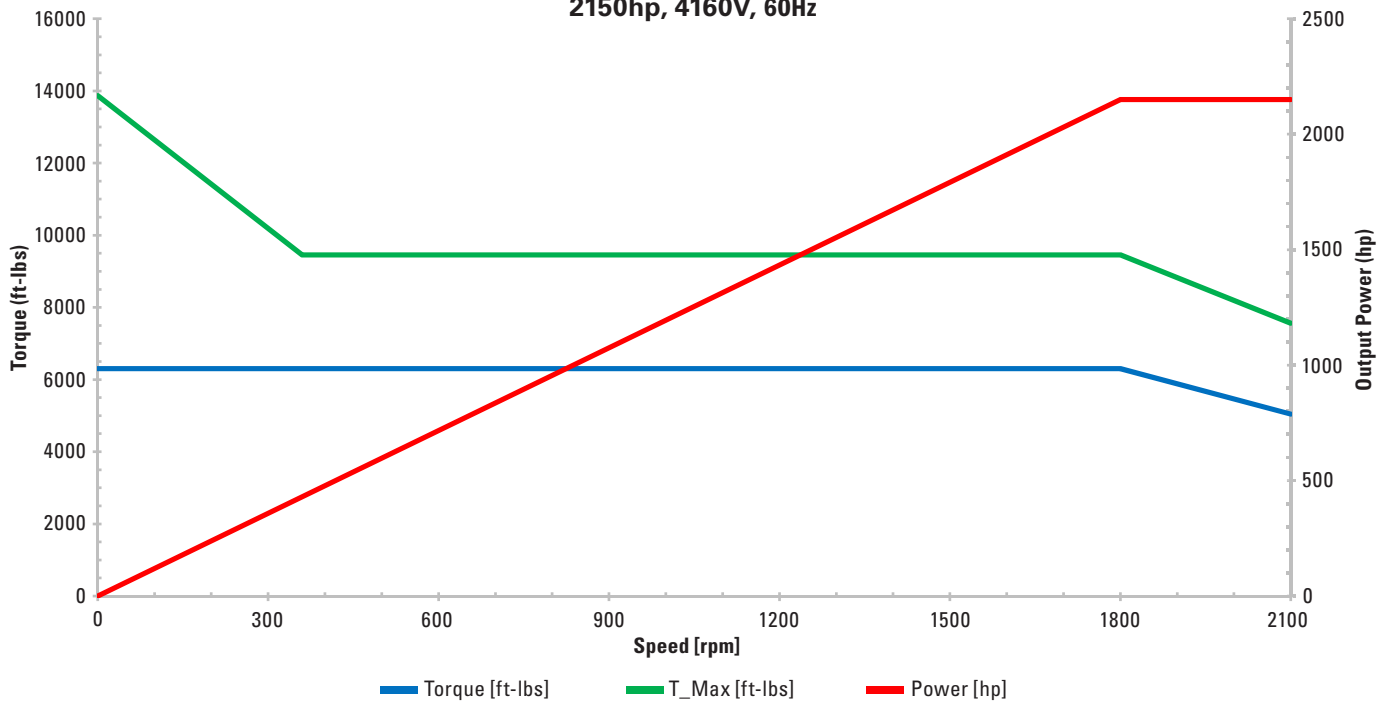
Cooling system	
Type	Water cooled
Nominal flow	9.2 gal/min
Maximum operating pressure	290 psi
Maximum inlet water temperature	104°F
Over-pressure relief valve	435 psi

Temperature monitoring	
Motor	Stator and bearings
Converter	IGBT modules and power choke

Connector system	
Main power	Cable gland or plug and socket to suit application and region
Auxiliary power	Cable gland or plug and socket to suit application and region



Torque Diagram VSD41-1600-78
2150hp, 4160V, 60Hz



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