



ASPC Project





END CUSTOMER	: Arya Sasol Polymer Company
CONTRACTOR	: DYPNF Co., Ltd.
VENDOR NAME	: Airpack Netherlands BV
EQUIPMENT DESCRIPTION	: Screw Compressor & Roots Blower : Package
PURCHASE ORDER NUMBER	: PO-PC2312-08

Customer Number Document : 3944-VD-0171-DYP-RE-400-LST-0004




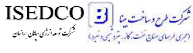
Airpack Document Number : 23383-10

Document Title : Main Motor Data Sheets




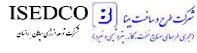
EED: Rejected.
Project MV Motor Data sheet (as attached) shall be filled and submitted.
Filled data sheet belongs to LV motors.

Review Code and Status		Contractor Initials/Signature	Date signed
	Code 1 REJECTED - Vendor to revise and Resubmit. Work cannot proceed		28 May 2025
<input type="checkbox"/>	Code 2 Comments As Noted - Work May proceed, subject to compliance with and incorporation of comments		
<input type="checkbox"/>	Code 3 No Comments - Work may proceed.		
<input type="checkbox"/>	Code 4 Information only - Review not required.		

00	Issued for Approval	13-05-2025	SC	KP	JJ
Rev. No.	Description	Date	Prepared by	Checked by	Approved by

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	MV MOTOR DATA SHEET AND PERFORMANCE CURVES						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
	3944	VD	RE	400	DSH	0096	00	3 of 19




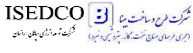
Rev.	MC/Client: All empty rows shall be filled out Title of document is include curves but curves have not been submitted in document		MC/Client: General note: Description Fields marked with a red asterisk must be filled in by the seller.	
00	Design Temp. Deg.C (Min / Max) : +5° C / 55° C	Vendor' s Name:		
00	Altitude:10m above sea level	Tag No. (s) : 44M-40001A/B -M1		
00	The plant structures, buildings and equipment foundations shall be designed to resist earthquake forces in accordance with ASCE 7-10/ ISDCPFS-Code 038 and for the defined seismic risk in Soil Report and Seismology Report. "Iranian Code for Seismic Resistant Design of Buildings", Standard No. 2800.	Quantity: 2		
00	Relative Humidity (Max / Design) : 100% / 80%	Climate: Dust, Sand, Sea Breeze		
Technical Data				
00	1-General :	Required	Vendor Data	
00	1-1 Cable info. :	Later		*
00	1-2 Explosion Proof / Industrial Type	As per LV Motor specification & Explosion Proof Materials		*
00	1-3 Earthing Cable	As per earthing detail instalation		*
00	1-4 Location / Service	Process Area/ Pump/ Fan/ Mixer/ Comp. /...	Compressor	
00	1-5 Power Cable Gland Size	Later	M63x1.5	
00	2-Electrical Characteristic:	Required	Vendor Data	
00	2-1 Motor Type	Induction (Squirrel cage)	Induction	
00	2-2 Stator Winding	Delta	Delta	
00	2-3 Rotor Bar Material	Copper	Copper	
00	2-4 Stator Winding Type	By vendor		
00	2-5 Service Factor	1, 1	1, 1	
00	2-6 Duty Cycle	Duty type S1-Continious	S1	
00	2-7 Insulation Class / Temp. Rise	F/B	F/B	
00	2-8 Voltage, Variations (V)	400V/230V ±5% 3ph/1ph	6000v	
00	2-9 Frequency, Variations (Hz)	50HZ ±2%		
00	2-10 Rated Current (A)	By vendor	50. 8a	
00	2-11 Number of Poles	By vendor	2	
00	2-12 Power Rating (kW)	By vendor	450 kW	
00	2-13 Power Factor (%)			
00	@1/4 Load	By vendor		
00	@2/4 Load	By vendor	0, 83	
00	@3/4 Load	By vendor	0, 87	
00	@4/4 Load	By vendor	0, 88	
00	Locked Rotor Power Factor			
00	2-14 Efficiency (%)			
00	@1/4 Load	By vendor		
00	@2/4 Load	By vendor	95, 9	
00	@3/4 Load	By vendor	96, 6	
00	@4/4 Load	By vendor	96, 6	
00	2-15 Speed (Synchronic & Full Load)	By vendor		2986
00	2-16 Starting Method	DOL/VFD		DOL

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
	3944	VD	RE	400	DSH	0096	00	4 of 19




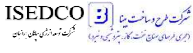
00	2-17 Starting Current (A) (@ Un/@ 0.8Un)	By vendor						
00	2-18 Starting Time (sec) (@ Un/@ 0.8Un)	By vendor						
00	2-19 Max Voltage Drop at Motor Terminals (%)	15						
00	2-20 Full Load Torque (N.m)	By vendor						1255
00	2-21 Starting Torque (% FLT)	By vendor						150
00	2-22 Max. Torque (%FLT)	By vendor						260
00	2-23 GD2 (Kg. m2)							
00	Rotor	By vendor						
00	Load	By vendor						10, 2
00	2-24 Withstand Fault Current (kA)	As per IEC by vendor						
00	Main Terminal Box	By vendor					TOP	
00	Auxiliary Terminal Box	By vendor					TOP	
00	2-25 No. of Starting per Hour:							
00	From Cold	3						
00	From Hot	2						
00	2-26 Time interval between two Consecutive starts							
00	From Cold (s)	By vendor						13
00	From Hot (s)	By vendor						7
00	2-27 Permissible locked rotor time (s):							
00	@100% voltage	By vendor						
00	@80% voltage	By vendor						
00	2-28 Torque-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor						*
00	2-29 Current-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor						
00	(at 100% & 80% Rated Voltage)	By vendor						
00	2-32 Max Locked Rotor Current at Rated Volts (%FLA)	By vendor						
00	3-Protection and Measurement:	Required						Vendor Data
00	3-1 Motor IP / Terminal Boxes IP	IP54 / IP55						IP55
00	3-2 Area Classification	Safe / Zone 1 / Zone 2						Zone 2
00	3-3 Explosion Protection	Exd / Exe/ Exde						Exde
00	3-4 Gas Group	IIB / IIC						IIB
00	3-5 Temperature Class	T3						T3
00	3-6 Certificate No.	By vendor						
00	3-7 PT100 / PTC	Not Required						PT100

MC/Client:
ATEX or IECEX certificate shall be mentioned




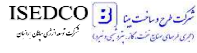
MC/Client:
Qty shall be mentioned

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
	3944	VD	RE	400	DSH	0096	00	5 of 19

00	3-8 Setpoint data for winding PTC:		
00	Trip	Not Required	
00	3-9 Noise Level	Less than 85 dBA @ 1m	80 dBA
00	3-10 Space Heater	Not Required	included
00	3-11 Impedance and fault Parameters:		
00	Subtransient Reactance X"d	By vendor	*
00	Transient Reactance X' d	By vendor	*
00	Synchronous Reactance Xd	By vendor	*
00	Stator AC Resistance (ohm @ oC)	By vendor	*
00	Max fault level (kA or MVA) & Duration	By vendor	*
00	Motor Warm-Up time constant	By vendor	*
00	Motor Cool-Dawn time constant	By vendor	*
00	Motor Stall time	By vendor	*
00	4. Mechanical Characteristic:	Required	Vendor Data
00	4-1 Motor Mounting	By vendor	b3t
00	4-2 Enclosure Type	By vendor	
00	4-3 Cooling Method	BY FAN (IC 411)	
00	4-4 Fan material (Non Sparking)	Brass/bronze/aluminium	
00	4-5 Direction of Rotation From NDE	By vendor	right
00	4-7 Coupling Type	By vendor	direct
00	4-8 Coupling Balance Tolerance	By vendor	
00	4-9 Air Gap	By vendor	
00	4-10 Bearing Type and Material (DE/NDE)	By vendor	6318-C3 / NU-218-C3
00	4-11 Max. Bearing Housing vibration velocity (mm/sec)	By vendor	
00	4-12 Max. Shaft vibration Displacement (mils p-p):		
00	3000 rpm	1 mils p-p	
00	1500 rpm	1.5 mils p-p	
00	1000 rpm	2 mils p-p	
00	4-13 Lubricating		
00	Grease/Oil/ Other	Grease	Grease
00	Self/ Forced	Self- Lubricated	Self-lubricated
00	Grease Relief Port (For regreasable Bearings)	Required	Included
00	4-14 Power Terminal Box		EX' e'
00	Type	By vendor	
00	Location From NDE (LHS/RHS)	By vendor	top
00	Direction of Cable Enterance	Bottom	right
00	4 Way Rotatiting Capability of Junction Box	Required	
00	4-15 Terminal Box for RTD		





CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No. 3944	Vendor DOC. VD	Discipline RE	Unit 400	Type DSH	Seq. No. 0096	Rev. : 00	Page 6 of 19

00	Location From NDE (LHS/RHS)	Not Required	top
00	Direction of Cable Enterance	Not Required	left
00	4-16 Terminal Box for Space Heater		
00	Location From NDE (LHS/RHS)	Not Required	
00	Direction of Cable Enterance	Not Required	
00	4-17 Base Plate	By vendor	
00	4-18 outline Dimension (mm)	By vendor	1990x896x1342
00	4-19 Weight (kg)	By vendor	4100
00	4-20 Motor IM Code	By vendor	B3T
00	4-21 Frame Size	By vendor	400L/J
00	4-22 Painting	By vendor	RAL 5010
00	4-23 Enclosure Type	By vendor	
00	4-24 Stator Frame Mterial	Cast Iron	Cast Iron
00	4-25 Stator Core/Bar	Copper	
00	4-26 Rotor Core/Bar	Copper	
00	4-27 Shaft	Steel	
00	4-28 Fans	Corsion Resistent-Non Sparking	
00	4-29 Cooler/Cooler Tubes	Corsion Resistent Material	
00	5-Testing and Inspection	Required	Vendor Data
00	5-1 Testing and Inspection	As per Related ITP	
00	Note 1: It will be specified for each motor as per requisition		
00	REMARKS: NDE: NON DRIVE END, OD: OUT DOOR, TF: TOTALLY ENCLOSED FAN COOLED, V: VERTICAL MOUNTED, B: BELT COUPLING, CP: CORROSION PROTECTED, F: FLANGE MOUNTED, H: HORIZONTAL MOUNTED, FLT: FULL LOAD TORQUE		

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
	3944	VD	RE	800	DSH	0119	00	3 of 19




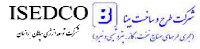
MC:
 - All empty rows shall be filled out
 - Title of document is include curves but
 curves have not been submitted in document.

Rev.	General Data		
00	Design Temp. Deg.C (Min / Max) : +5° C / 55° C	Vendor' s Name:	
00	Altitude:10m above sea level	Tag No. (s) : 44M-80001A/B, 80005A/B/C	
00	· The plant structures, buildings and equipment foundations shall be designed to resist earthquake forces in accordance with ASCE 7-10/ ISDCPFS-Code 038 and for the defined seismic risk in Soil Report and Seismology Report. · "Iranian Code for Seismic Resistant Design of Buildings", Standard No. 2800.	Quantity: 5	
00	Relative Humidity (Max / Design) : 100% / 80%	Climate: Dust, Sand, Sea Breeze	
00	Technical Data		
00	1-General :	Required	Vendor Data
00	1-1 Cable info. :	Later	
00	1-2 Explosion Proof / Industrial Type	As per LV Motor specification & Explosion Proof Materials	
00	1-3 Earthing Cable	As per earthing detail instalation	
00	1-4 Location / Service	Process Area/ Pump/ Fan/ Mixer/ Comp. /...	Compressor
00	1-5 Power Cable Gland Size	Later	M63X1.5
00	2-Electrical Characteristic:	Required	Vendor Data
00	2-1 Motor Type	Induction (Squirrel cage)	Induction
00	2-2 Stator Winding	Delta	Delta
00	2-3 Rotor Bar Material	Copper	Copper
00	2-4 Stator Winding Type	By vendor	
00	2-5 Service Factor	1, 1	1, 1
00	2-6 Duty Cycle	Duty type S1-Continious	S1
00	2-7 Insulation Class / Temp. Rise	F/B	F/B
00	2-8 Voltage, Variations (V)	400V/230V , ±5% , 3ph/1ph	6000v
00	2-9 Frequency, Variations (Hz)	50HZ ± 2%	
00	2-10 Rated Current (A)	By vendor	28. 7A
00	2-11 Number of Poles	By vendor	2
00	2-12 Power Rating (kW)	By vendor	250 kW
00	2-13 Power Factor (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	0, 83
00	@3/4 Load	By vendor	0, 86
00	@4/4 Load	By vendor	0, 88
00	Locked Rotor Power Factor		
00	2-14 Efficiency (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	95
00	@3/4 Load	By vendor	95, 1
00	@4/4 Load	By vendor	95, 1
00	2-15 Speed (Synchronic & Full Load)	By vendor	2978
00	2-16 Starting Method	DOL/VFD	DOL




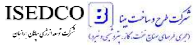
CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No. 3944	Vendor DOC. VD	Discipline RE	Unit 800	Type DSH	Seq. No. 0119	Rev. : 00	Page 4 of 19

00	2-17 Starting Current (A) (@ Un/@ 0.8Un)	By vendor	
00	2-18 Starting Time (sec) (@ Un/@ 0.8Un)	By vendor	
00	2-19 Max Voltage Drop at Motor Terminals (%)	15	
00	2-20 Full Load Torque (N.m)	By vendor	802
00	2-21 Starting Torque (% FLT)	By vendor	90
00	2-22 Max. Torque (%FLT)	By vendor	110
00	2-23 GD2 (Kg. m2)		
00	Rotor	MC: These values are Withstand fault current not location of terminal box	
00	Load	By vendor	2, 8
00	2-24 Withstand Fault Current (kA)	As per IEC by vendor	
00	Main Terminal Box	By vendor	RIGHT
00	Auxiliary Terminal Box	By vendor	LEFT
00	2-25 No. of Starting per Hour:		
00	From Cold	3	
00	From Hot	2	
00	2-26 Time interval between two Consecutive starts		
00	From Cold (s)	By vendor	
00	From Hot (s)	By vendor	
00	2-27 Permissible locked rotor time (s):		
00	@100% voltage	By vendor	31
00	@80% voltage	By vendor	
00	2-28 Torque-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	2-29 Current-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	(at 100% & 80% Rated Voltage)	By vendor	
00	2-32 Max Locked Rotor Current at Rated Volts (%FLA)	By vendor	
00	3-Protection and Measurement:	Required	Vendor Data
00	3-1 Motor IP / Terminal Boxes IP	IP54 / IP55	IP55
00	3-2 Area Classification	Safe / Zone 1 / Zone 2	Safe
00	3-3 Explosion Protection	Exd / Exe/ Exde	-
00	3-4 Gas Group	IIB / IIC	-
00	3-5 Temperature Class	T3	-
00	3-6 Certificate No.	By vendor	
00	3-7 PT100 / PTC	Not Required	PT100




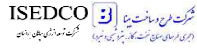
MC: Qty shall be mentioned

CONTRACTOR :  SAZEH CONSULTANTS Engineering & Construction  SAZEH TEHRAN	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER :  شرکت پلیمو آریا ساسول ARYA SASOL POLYMER COMPANY	
	Data Sheet for MV Motors						MC : :  شرکت مهندسی و مشاوره ISEDCO	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
	3944	VD	RE	800	DSH	0119	00	5 of 19




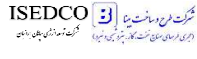
00	3-8 Setpoint data for winding PTC:		
00	Trip	Not Required	
00	3-9 Noise Level	Less than 85 dBA @ 1m	78
00	3-10 Space Heater	Not Required	included
00	3-11 Impedance and fault Parameters:		
00	Subtransient Reactance X"d	By vendor	
00	Transient Reactance X' d	By vendor	
00	Synchronous Reactance Xd	By vendor	
00	Stator AC Resistance (ohm @ oC)	By vendor	
00	Max fault level (kA or MVA) & Duration	By vendor	
00	Motor Warm-Up time constant	By vendor	
00	Motor Cool-Dawn time constant	By vendor	
00	Motor Stall time	By vendor	
00	4. Mechanical Characteristic:	Required	Vendor Data
00	4-1 Motor Mounting	By vendor	b35R
00	4-2 Enclosure Type	By vendor	
00	4-3 Cooling Method	BY FAN (IC 411)	
00	4-4 Fan material (Non Sparking)	Brass/bronze/aluminium	
00	4-5 Direction of Rotation From NDE	By vendor	right
00	4-7 Coupling Type	By vendor	direct
00	4-8 Coupling Balance Tolerance	By vendor	
00	4-9 Air Gap	By vendor	
00	4-10 Bearing Type and Material (DE/NDE)	By vendor	6314-C4 / 6314-C4
00	4-11 Max. Bearing Housing vibration velocity (mm/sec)	By vendor	
00	4-12 Max. Shaft vibration Displacement (mils p-p):		
00	3000 rpm	1 mils p-p	
00	1500 rpm	1.5 mils p-p	
00	1000 rpm	2 mils p-p	
00	4-13 Lubricating		
00	Grease/Oil/ Other	Grease	Grease
00	Self/ Forced	Self- Lubricated	Self-lubricated
00	Grease Relief Port (For regreasable Bearings)	Required	Included
00	4-14 Power Terminal Box		
00	Type	By vendor	
00	Location From NDE (LHS/RHS)	By vendor	left
00	Direction of Cable Enterance	Bottom	bottom
00	4 Way Rotatiting Capability of Junction Box	Required	
00	4-15 Terminal Box for RTD		

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
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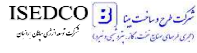
00	Location From NDE (LHS/RHS)	Not Required	right
00	Direction of Cable Entrance	Not Required	bottom
00	4-16 Terminal Box for Space Heater		
00	Location From NDE (LHS/RHS)	Not Required	
00	Direction of Cable Entrance	Not Required	
00	4-17 Base Plate	By vendor	
00	4-18 outline Dimension (mm)	By vendor	1835x728x1103
00	4-19 Weight (kg)	By vendor	2141
00	4-20 Motor IM Code	By vendor	b35r
00	4-21 Frame Size	By vendor	315G/F
00	4-22 Painting	By vendor	RAL 5010
00	4-23 Enclosure Type	By vendor	
00	4-24 Stator Frame Mterial	Cast Iron	Cast Iron
00	4-25 Stator Core/Bar	Copper	
00	4-26 Rotor Core/Bar	Copper	
00	4-27 Shaft	Steel	
00	4-28 Fans	Corsion Resistent-Non Sparking	
00	4-29 Cooler/Cooler Tubes	Corsion Resistent Material	
00	5-Testing and Inspection	Required	Vendor Data
00	5-1 Testing and Inspection	As per Related ITP	
00	Note 1: It will be specified for each motor as per requisition		
00	REMARKS: NDE: NON DRIVE END, OD: OUT DOOR, TF: TOTALLY ENCLOSED FAN COOLED, V: VERTICAL MOUNTED, B: BELT COUPLING, CP: CORROSION PROTECTED, F: FLANGE MOUNTED, H: HORIZONTAL MOUNTED, FLT: FULL LOAD TORQUE		

 SAZEH CONSULTANTS Engineering & Construction  SAZEH TEHRAN	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER :  شرکت پلیمو آریا ساسول ARYA SASOL POLYMER COMPANY	
	Data Sheet for MV Motors						MC : :  شرکت مهندسی و مشاوره ISEDCO	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
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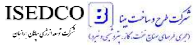
Rev.	General Data		
00	Design Temp. Deg.C (Min / Max) : +5° C / 55° C	Vendor' s Name:	
00	Altitude:10m above sea level	Tag No. (s) : 44M-80002A/B	
00	<ul style="list-style-type: none"> - The plant structures, buildings and equipment foundations shall be designed to resist earthquake forces in accordance with ASCE 7-10/ ISDCPFS-Code 038 and for the defined seismic risk in Soil Report and Seismology Report. - "Iranian Code for Seismic Resistant Design of Buildings", Standard No. 2800. 	Quantity: 2	
00	Relative Humidity (Max / Design) : 100% / 80%	Climate: Dust, Sand, Sea Breeze	
00	Technical Data		
00	1-General :	Required	Vendor Data
00	1-1 Cable info. :	Later	
00	1-2 Explosion Proof / Industrial Type	As per LV Motor specification & Explosion Proof Materials	
00	1-3 Earthing Cable	As per earthing detail instalation	
00	1-4 Location / Service	Process Area/ Pump/ Fan/ Mixer/ Comp. /...	Roots blower
00	1-5 Power Cable Gland Size	Later	M63X1.5
00	2-Electrical Characteristic:	Required	Vendor Data
00	2-1 Motor Type	Induction (Squirrel cage)	Induction
00	2-2 Stator Winding	Delta	Delta
00	2-3 Rotor Bar Material	Copper	Copper
00	2-4 Stator Winding Type	By vendor	
00	2-5 Service Factor	1, 1	1, 1
00	2-6 Duty Cycle	Duty type S1-Continious	S1
00	2-7 Insulation Class / Temp. Rise	F/B	F/B
00	2-8 Voltage, Variations (V)	400V/230V , ±5%, 3ph/1ph	6000v
00	2-9 Frequency, Variations (Hz)	50HZ±2%	
00	2-10 Rated Current (A)	By vendor	31
00	2-11 Number of Poles	By vendor	4
00	2-12 Power Rating (kW)	By vendor	250 kW
00	2-13 Power Factor (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	0, 65
00	@3/4 Load	By vendor	0, 76
00	@4/4 Load	By vendor	0, 82
00	Locked Rotor Power Factor		
00	2-14 Efficiency (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	94
00	@3/4 Load	By vendor	94, 6
00	@4/4 Load	By vendor	94, 6
00	2-15 Speed (Synchronic & Full Load)	By vendor	1486
00	2-16 Starting Method	DOL/VFD	DOL

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No. 3944	Vendor DOC. VD	Discipline RE	Unit 800	Type DSH	Seq. No. 0119	Rev. : 00	Page 4 of 19




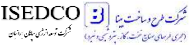
00	2-17 Starting Current (A) (@ Un/@ 0.8Un)	By vendor	
00	2-18 Starting Time (sec) (@ Un/@ 0.8Un)	By vendor	
00	2-19 Max Voltage Drop at Motor Terminals (%)	15	
00	2-20 Full Load Torque (N.m)	By vendor	1607
00	2-21 Starting Torque (% FLT)	By vendor	170
00	2-22 Max. Torque (%FLT)	By vendor	200
00	2-23 GD2 (Kg. m2)		
00	Rotor	By vendor	
00	Load	By vendor	4, 1
00	2-24 Withstand Fault Current (kA)	As per IEC by vendor	
00	Main Terminal Box	By vendor	RIGHT
00	Auxiliary Terminal Box	By vendor	LEFT
00	2-25 No. of Starting per Hour:		
00	From Cold	3	
00	From Hot	2	
00	2-26 Time interval between two Consecutive starts		
00	From Cold (s)	By vendor	
00	From Hot (s)	By vendor	
00	2-27 Permissible locked rotor time (s):		
00	@100% voltage	By vendor	49
00	@80% voltage	By vendor	
00	2-28 Torque-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	2-29 Current-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	(at 100% & 80% Rated Voltage)	By vendor	
00	2-32 Max Locked Rotor Current at Rated Volts (%FLA)	By vendor	
00	3-Protection and Measurement:	Required	Vendor Data
00	3-1 Motor IP / Terminal Boxes IP	IP54 / IP55	IP55
00	3-2 Area Classification	Safe / Zone 1 / Zone 2	Safe
00	3-3 Explosion Protection	Exd / Exe/ Exde	-
00	3-4 Gas Group	IIB / IIC	-
00	3-5 Temperature Class	T3	-
00	3-6 Certificate No.	By vendor	
00	3-7 PT100 / PTC	Not Required	PT100

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
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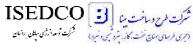
00	3-8 Setpoint data for winding PTC:		
00	Trip	Not Required	
00	3-9 Noise Level	Less than 85 dBA @ 1m	75
00	3-10 Space Heater	Not Required	included
00	3-11 Impedance and fault Parameters:		
00	Subtransient Reactance X"d	By vendor	
00	Transient Reactance X' d	By vendor	
00	Synchronous Reactance Xd	By vendor	
00	Stator AC Resistance (ohm @ oC)	By vendor	
00	Max fault level (kA or MVA) & Duration	By vendor	
00	Motor Warm-Up time constant	By vendor	
00	Motor Cool-Dawn time constant	By vendor	
00	Motor Stall time	By vendor	
00	4. Mechanical Characteristic:	Required	Vendor Data
00	4-1 Motor Mounting	By vendor	b3R
00	4-2 Enclosure Type	By vendor	
00	4-3 Cooling Method	BY FAN (IC 411)	
00	4-4 Fan material (Non Sparking)	Brass/bronze/aluminium	
00	4-5 Direction of Rotation From NDE	By vendor	right
00	4-7 Coupling Type	By vendor	direct
00	4-8 Coupling Balance Tolerance	By vendor	
00	4-9 Air Gap	By vendor	
00	4-10 Bearing Type and Material (DE/NDE)	By vendor	NU-320-C3 / 6316-C3
00	4-11 Max. Bearing Housing vibration velocity (mm/sec)	By vendor	
00	4-12 Max. Shaft vibration Displacement (mils p-p):		
00	3000 rpm	1 mils p-p	
00	1500 rpm	1.5 mils p-p	
00	1000 rpm	2 mils p-p	
00	4-13 Lubricating		
00	Grease/Oil/ Other	Grease	Grease
00	Self/ Forced	Self- Lubricated	Self-lubricated
00	Grease Relief Port (For regreasable Bearings)	Required	Included
00	4-14 Power Terminal Box		
00	Type	By vendor	
00	Location From NDE (LHS/RHS)	By vendor	left
00	Direction of Cable Enterance	Bottom	bottom
00	4 Way Rotatiting Capability of Junction Box	Required	
00	4-15 Terminal Box for RTD		

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No. 3944	Vendor DOC. VD	Discipline RE	Unit 800	Type DSH	Seq. No. 0119	Rev. : 00	Page 6 of 19




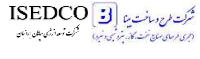
00	Location From NDE (LHS/RHS)	Not Required	right
00	Direction of Cable Enterance	Not Required	bottom
00	4-16 Terminal Box for Space Heater		
00	Location From NDE (LHS/RHS)	Not Required	
00	Direction of Cable Enterance	Not Required	
00	4-17 Base Plate	By vendor	
00	4-18 outline Dimension (mm)	By vendor	1885x728x1103
00	4-19 Weight (kg)	By vendor	2235
00	4-20 Motor IM Code	By vendor	b3r
00	4-21 Frame Size	By vendor	315G/F
00	4-22 Painting	By vendor	RAL 5010
00	4-23 Enclosure Type	By vendor	
00	4-24 Stator Frame Mterial	Cast Iron	Cast Iron
00	4-25 Stator Core/Bar	Copper	
00	4-26 Rotor Core/Bar	Copper	
00	4-27 Shaft	Steel	
00	4-28 Fans	Corsion Resistent-Non Sparking	
00	4-29 Cooler/Cooler Tubes	Corsion Resistent Material	
00	5-Testing and Inspection	Required	Vendor Data
00	5-1 Testing and Inspection	As per Related ITP	
00	Note 1: It will be specified for each motor as per requisition		
00	REMARKS: NDE: NON DRIVE END, OD: OUT DOOR, TF: TOTALLY ENCLOSED FAN COOLED, V: VERTICAL MOUNTED, B: BELT COUPLING, CP: CORROSION PROTECTED, F: FLANGE MOUNTED, H: HORIZONTAL MOUNTED, FLT: FULL LOAD TORQUE		

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
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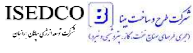
Rev.	General Data		
00	Design Temp. Deg.C (Min / Max) : +5° C / 55° C	Vendor' s Name:	
00	Altitude:10m above sea level	Tag No. (s) : 44M-80004A/B	
00	<ul style="list-style-type: none"> - The plant structures, buildings and equipment foundations shall be designed to resist earthquake forces in accordance with ASCE 7-10/ ISDCPFS-Code 038 and for the defined seismic risk in Soil Report and Seismology Report. - "Iranian Code for Seismic Resistant Design of Buildings", Standard No. 2800. 	Quantity: 2	
00	Relative Humidity (Max / Design): 100% / 80%	Climate: Dust, Sand, Sea Breeze	
00	Technical Data		
00	1-General :	Required	Vendor Data
00	1-1 Cable info. :	Later	
00	1-2 Explosion Proof / Industrial Type	As per LV Motor specification & Explosion Proof Materials	
00	1-3 Earthing Cable	As per earthing detail instalation	
00	1-4 Location / Service	Process Area/ Pump/ Fan/ Mixer/ Comp. /...	Compressor
00	1-5 Power Cable Gland Size	Later	M63X1.5
00	2-Electrical Characteristic:	Required	Vendor Data
00	2-1 Motor Type	Induction (Squirrel cage)	Induction
00	2-2 Stator Winding	Delta	Delta
00	2-3 Rotor Bar Material	Copper	Copper
00	2-4 Stator Winding Type	By vendor	
00	2-5 Service Factor	1, 1	1, 1
00	2-6 Duty Cycle	Duty type S1-Continious	S1
00	2-7 Insulation Class / Temp. Rise	F/B	F/B
00	2-8 Voltage, Variations (V)	400V/230V , ±5%, 3ph/1ph	6000v
00	2-9 Frequency, Variations (Hz)	50HZ±2%	
00	2-10 Rated Current (A)	By vendor	66, 2
00	2-11 Number of Poles	By vendor	2
00	2-12 Power Rating (kW)	By vendor	590 kW
00	2-13 Power Factor (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	0, 85
00	@3/4 Load	By vendor	0, 87
00	@4/4 Load	By vendor	0, 89
00	Locked Rotor Power Factor		
00	2-14 Efficiency (%)		
00	@1/4 Load	By vendor	
00	@2/4 Load	By vendor	95, 6
00	@3/4 Load	By vendor	95, 9
00	@4/4 Load	By vendor	96, 3
00	2-15 Speed (Synchronic & Full Load)	By vendor	2981
00	2-16 Starting Method	DOL/VFD	DOL

CONTRACTOR :  SAZEH CONSULTANTS Engineering & Construction  SAZEH TEHRAN	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER :  شرکت پلیمو آریا ساسول ARYA SASOL POLYMER COMPANY	
	Data Sheet for MV Motors						MC : :  شرکت مهندسی ایزدکو ISED CO	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
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00	2-17 Starting Current (A) (@ Un/@ 0.8Un)	By vendor	
00	2-18 Starting Time (sec) (@ Un/@ 0.8Un)	By vendor	
00	2-19 Max Voltage Drop at Motor Terminals (%)	15	
00	2-20 Full Load Torque (N.m)	By vendor	1890
00	2-21 Starting Torque (% FLT)	By vendor	55
00	2-22 Max. Torque (%FLT)	By vendor	250
00	2-23 GD2 (Kg. m2)		
00	Rotor	By vendor	
00	Load	By vendor	8, 7
00	2-24 Withstand Fault Current (kA)	As per IEC by vendor	
00	Main Terminal Box	By vendor	RIGHT
00	Auxiliary Terminal Box	By vendor	LEFT
00	2-25 No. of Starting per Hour:		
00	From Cold	3	
00	From Hot	2	
00	2-26 Time interval between two Consecutive starts		
00	From Cold (s)	By vendor	
00	From Hot (s)	By vendor	
00	2-27 Permissible locked rotor time (s):		
00	@100% voltage	By vendor	38
00	@80% voltage	By vendor	
00	2-28 Torque-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	2-29 Current-Speed Characteristics Curves (at 100% & 80% Rated Voltage)	By vendor	
00	(at 100% & 80% Rated Voltage)	By vendor	
00	2-32 Max Locked Rotor Current at Rated Volts (%FLA)	By vendor	
00	3-Protection and Measurement:	Required	Vendor Data
00	3-1 Motor IP / Terminal Boxes IP	IP54 / IP55	IP55
00	3-2 Area Classification	Safe / Zone 1 / Zone 2	Safe
00	3-3 Explosion Protection	Exd / Exe/ Exde	-
00	3-4 Gas Group	IIB / IIC	-
00	3-5 Temperature Class	T3	-
00	3-6 Certificate No.	By vendor	
00	3-7 PT100 / PTC	Not Required	PT100

CONTRACTOR :  SAZEH CONSULTANTS Engineering & Construction  SAZEPAD TEHRAN	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER :  شرکت پلیمو آریا ساسول ARYA SASOL POLYMER COMPANY	
	Data Sheet for MV Motors						MC : :  شرکت مهندسی و مشاوره ISEDCO	
Owner Document Number :	Owner Project No.	Vendor DOC.	Discipline	Unit	Type	Seq. No.	Rev. :	Page
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00	3-8 Setpoint data for winding PTC:		
00	Trip	Not Required	
00	3-9 Noise Level	Less than 85 dBA @ 1m	84
00	3-10 Space Heater	Not Required	included
00	3-11 Impedance and fault Parameters:		
00	Subtransient Reactance X"d	By vendor	
00	Transient Reactance X' d	By vendor	
00	Synchronous Reactance Xd	By vendor	
00	Stator AC Resistance (ohm @ oC)	By vendor	
00	Max fault level (kA or MVA) & Duration	By vendor	
00	Motor Warm-Up time constant	By vendor	
00	Motor Cool-Dawn time constant	By vendor	
00	Motor Stall time	By vendor	
00	4. Mechanical Characteristic:	Required	Vendor Data
00	4-1 Motor Mounting	By vendor	b3R
00	4-2 Enclosure Type	By vendor	
00	4-3 Cooling Method	BY FAN (IC 411)	
00	4-4 Fan material (Non Sparking)	Brass/bronze/aluminium	
00	4-5 Direction of Rotation From NDE	By vendor	left
00	4-7 Coupling Type	By vendor	direct
00	4-8 Coupling Balance Tolerance	By vendor	
00	4-9 Air Gap	By vendor	
00	4-10 Bearing Type and Material (DE/NDE)	By vendor	6320-C3 / 6220-C3
00	4-11 Max. Bearing Housing vibration velocity (mm/sec)	By vendor	
00	4-12 Max. Shaft vibration Displacement (mils p-p):		
00	3000 rpm	1 mils p-p	
00	1500 rpm	1.5 mils p-p	
00	1000 rpm	2 mils p-p	
00	4-13 Lubricating		
00	Grease/Oil/ Other	Grease	Grease
00	Self/ Forced	Self- Lubricated	Self-lubricated
00	Grease Relief Port (For regreasable Bearings)	Required	Included
00	4-14 Power Terminal Box		
00	Type	By vendor	
00	Location From NDE (LHS/RHS)	By vendor	left
00	Direction of Cable Enterance	Bottom	bottom
00	4 Way Rotatiting Capability of Junction Box	Required	
00	4-15 Terminal Box for RTD		

CONTRACTOR :  	300 KT POLYETHYLENE PLANT ARYA SASOL POLYMER COMPANY (ASPC)						OWNER : 	
	Data Sheet for MV Motors						MC : : 	
Owner Document Number :	Owner Project No. 3944	Vendor DOC. VD	Discipline RE	Unit 800	Type DSH	Seq. No. 0119	Rev. : 00	Page 6 of 19

00	Location From NDE (LHS/RHS)	Not Required	right
00	Direction of Cable Entrance	Not Required	bottom
00	4-16 Terminal Box for Space Heater		
00	Location From NDE (LHS/RHS)	Not Required	
00	Direction of Cable Entrance	Not Required	
00	4-17 Base Plate	By vendor	
00	4-18 outline Dimension (mm)	By vendor	2144x888x1273
00	4-19 Weight (kg)	By vendor	4002
00	4-20 Motor IM Code	By vendor	b3r
00	4-21 Frame Size	By vendor	400H/G
00	4-22 Painting	By vendor	RAL 5010
00	4-23 Enclosure Type	By vendor	
00	4-24 Stator Frame Mterial	Cast Iron	Cast Iron
00	4-25 Stator Core/Bar	Copper	
00	4-26 Rotor Core/Bar	Copper	
00	4-27 Shaft	Steel	
00	4-28 Fans	Corsion Resistent-Non Sparking	
00	4-29 Cooler/Cooler Tubes	Corsion Resistent Material	
00	5-Testing and Inspection	Required	Vendor Data
00	5-1 Testing and Inspection	As per Related ITP	
00	Note 1: It will be specified for each motor as per requisition		
00	REMARKS: NDE: NON DRIVE END, OD: OUT DOOR, TF: TOTALLY ENCLOSED FAN COOLED, V: VERTICAL MOUNTED, B: BELT COUPLING, CP: CORROSION PROTECTED, F: FLANGE MOUNTED, H: HORIZONTAL MOUNTED, FLT: FULL LOAD TORQUE		