



NET4GAS, s.r.o

**COMPRESSOR STATION JIRKOV
73 BAR
List of Comments, Exceptions and
Deviations from **Owner****

29.11.2017

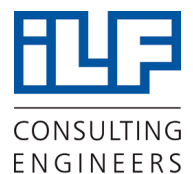
Annex 1

Attachment 1.27

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REVISION HISTORY

002	29.11.17	APPROVED	Fanaca	Foltin	Schorling
001	28.11.17	APPROVED	Fanaca	Foltin	Schorling
000	26.05.17	APPROVED	Fanaca	Foltin	Schorling
B01	26.05.17	Issue for Review	Fanaca	Foltin	Schorling
Rev.	Date	Issue, Purpose	Prepared	Checked	Approved

Item No.	Document number and title	Document revision	Chapter / paragraph / page	Content of document / paragraph / page	C=comment E=exception D=deviation	ILF comment / exception / deviation to Tender Documentation	OWNER review	SUPPLIER additional comments and clarifications Date:	OWNER final review
2	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 3.1, item 15, page 15	Three (3) complete control and instrumentation systems, including the following as a minimum: -Unit control systems and cabinets -Active magnetic bearing control cabinets -Instrumentation and sensors -Signal cabling and junction boxes for the unit control system -Hook-up and installation material -Software back-up / recovery CDs	D	Item 15 updates to: Three (3) complete control and instrumentation systems, including the following as a minimum: -Unit control systems and cabinets -Active magnetic bearing control cabinets -Instrumentation and sensors -Signal cabling and junction boxes for the unit control system -Hook-up and installation material -Software back-up / recovery CDs -One load sharing system for all three EMCS			
3	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 3.2, item 16, page 18	Supervision for Site installation and assembly of all equipment included in the Scope of Supply; all tools and procedures required for Site installation and assembly shall be provided by the Supplier.	D	Item 16 updates to: Site installation and assembly of all equipment included in the Scope of Supply; all tools and procedures required for Site installation and assembly shall be provided by the Supplier.			
4	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 4.1.5.3.2.15, 1st paragraph, page 32	An operation and monitoring system shall be integrated in the frequency converter, fulfilling the following minimum requirements: -HMI with colour display, -Displaying of all converter related measuring values, parameters, status and fault messages (a feature list shall be part of the offer), -Harmonic analysis of input and output voltages and currents, time domain and frequency domain analysis. -Displaying of all status signals of auxiliary systems and of motor, transformer, etc., -Control elements to operate and parameterize, -User interface in German language, -Local /remote switching via key-operated switch, The operation and monitoring unit preferably is installed in the control cabinet's door.	D	1st paragraph updates to: An operation and monitoring system shall be integrated in the frequency converter, fulfilling the following minimum requirements: -HMI with colour display, -Displaying of all converter related measuring values, parameters, status and fault messages (a feature list shall be part of the offer), -Harmonic analysis of input and output voltages and currents, time domain and frequency domain analysis. -Displaying of all status signals of auxiliary systems and of motor, transformer, etc., -Control elements to operate and parameterize, -The user interface shall be in English and Czech with the possibility to select between English and Czech languages, -Local /remote switching via key-operated switch, The operation and monitoring unit preferably is installed in the control cabinet's door.			
5	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 4.2.12, 1st paragraph, 5th bullet point, page 43	-performance curves in the coordinates isentropic head [kJ/kg] vs. actual suction flow [m³/h].	D	1st paragraph, 5th bullet point updates to: -performance curves in the coordinates isentropic head [kJ/kg] vs. actual suction flow [m³/s]			
6	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 4.4.1, 1st paragraph, page 47	The EMCS cooling system shall include the following equipment as a minimum: -Cooling system for the VSD -Cooling system for the EM -Back cooling system All EMCS cooling systems shall be controlled by the UCS.	D	1st paragraph updates to: The EMCS cooling system shall include the following equipment as a minimum: -Cooling system for the VSD -Cooling system for the EM All EMCS cooling systems shall be controlled by the UCS.			
7	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 4.5.3.6.1, 1st paragraph, page 57	The control of the compressor shall permit equal load sharing between the compressors operating in parallel. Load sharing is implemented in the Station Control System. Load sharing control defines a speed set-point for all available, pre-selected compressors.	D	1st paragraph updates to: The control of the compressor shall permit equal load sharing between the compressors operating in parallel. Load sharing is implemented in the Unit Control System . Load sharing control defines a speed set-point for all available, pre-selected compressors.			

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8	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 4.5.4.2, 10th paragraph, page 64	The characteristics of the HMI displays (i.e. screen resolution, graphical objects, headers, etc.) shall be in compliance with the standard of the Owner, which are also in use in the SCS. The Owner will hand over in the design phase typical screens and additional basic information accordingly. Dedicated meetings with the Owner and SCS Supplier shall be held to define the requirements HMI screens.	D	<u>10th paragraph updates to:</u> The characteristics of the HMI displays (i.e. screen resolution, graphical objects, headers, engineering units to be displayed , etc.) shall be in compliance with the standard of the Owner, which are also in use in the SCS. The Owner will hand over in the design phase typical screens and additional basic information accordingly. Dedicated meetings with the Owner and SCS Supplier shall be held to define the requirements HMI screens.			
9	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 7.2, page 96	Supervision for Site Installation (base scope) The Supplier shall include in the base scope the supervision of site installation of all equipment included in the Scope of Supply as defined in chapter 3.	D	<u>chapter 7.2 updates to:</u> Supervision for Site Installation (optional scope) The Supplier shall include in the optional scope the supervision of site installation of all equipment included in the Scope of Supply as defined in chapter 3.			
10	C4G-JI73-ILF-KS007-STR-SPC-800-002 Specification for Electro Motor Compressor Set (EMCS)	002	chapter 12, 8th paragraph, page 131	The Supplier shall include the price for each type of training, including program. The Supplier shall consider a number of ten (10) persons for each type of training listed above (maintenance, operation etc.). The Supplier shall consider all necessary training manuals and documentation; the training documentation shall be submitted in English and Czech language. The training sessions will be held in English. The Supplier shall submit all training documentation as required in Annex 1, 1.3. The Supplier shall prepare the schedule for all training sessions included and shall submit this to Owner for review and approval.	D	<u>8th paragraph updates to:</u> The Supplier shall include the price for each type of training, including program. The Supplier shall consider a number of ten (10) persons for each type of training listed above (maintenance, operation etc.). The Supplier shall consider all necessary training manuals and documentation; the training documentation shall be submitted in English and Czech language. The training sessions will be held in English. The Supplier shall submit all training documentation as required in Annex 1, Attachment 1.3 . The Supplier shall prepare the schedule for all training sessions included and shall submit this to Owner for review and approval.			
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