Connector pin list of the analogue and digital inputs and outputs -µQAS-

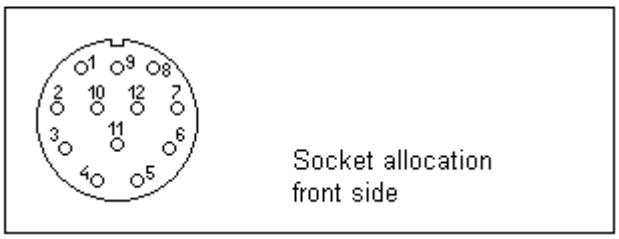
Contents

Technical data:		HKS-Prozeßtechnik GmbH
analogue inputs	**-SENS-**	standard allocation

SENS pin-nu.	signal definition	Umin./V	Umax./V	Logical name of the channal	
				head 1	head 2
1	welding current +	-10	+10	AIN0+	AIN2+
2	welding current -	0	0	AIN0-	AIN2-
3	welding voltage +	-10	+10	AIN1+	AIN3+
4	welding voltage -	0	0	AIN1-	AIN3-
5	speed +	10/100Hz	30/5kHz	INCR2+	INCR4+
6	supply –12V DC	-12,5	-11,5		
7	*wire feed +	10/100Hz	30/5kHz	INCR1+	INCR3+
8	*wire feed -	0	0	INCR1-	INCR3-
9	supply+12V DC	+11,5	+12,5		
10	signal ground GND	0	0		
11	gas flow -	0	0	AIN4-	AIN6-
12	gas flow +	-10	+10	AIN4+	AIN6+

Note: the input for wire feed is not suitable for DC signals but for impulse signals or rectangle signals, typically provided by rotary encoders. The used encoders must have push-pull. With open-collector-outputs corresponding pull-up-resistors must provided.

Socket allocation front side:



Connector	Type/Standard	Pin number
SENS	rounded connector M23	12-pin socket

State: 07.04.2005	sign.:O. Hollmann

Technical data: HKS-Prozeßtechnik GmbH

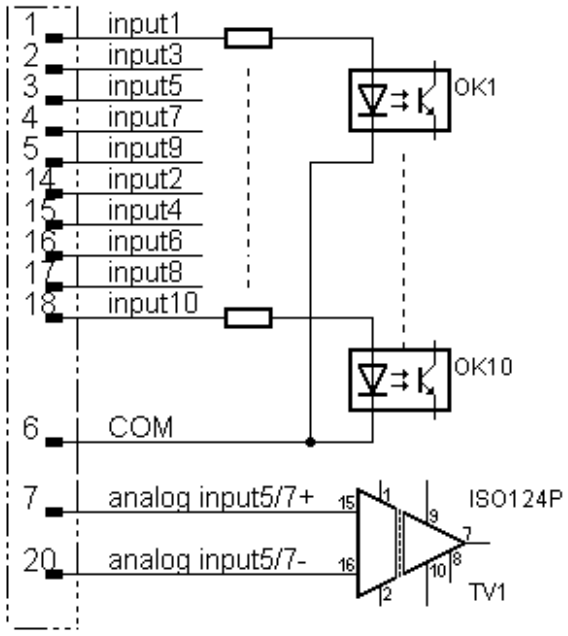
digital in-and outputs **-DIGINOUT-** Standard allocation

DIGINOUT pin-nu.	standard reservation	signal definition	Umin./ V	Umax./ V	Logische Kanal-bezeichnung	
					Kopf 1	Kopf 2
1	program-number 1	input 1	+15	+30	DI 0	DI 8
2	program-number 4	input 3	+15	+30	DI 2	DI 10
3	program-number 16	input 5	+15	+30	DI 4	DI 12
4	program-number 64	input 7	+15	+30	DI 6	DI 14
5	start welding	input 9	+15	+30	DI 16	DI 17
6	COM	Signal ground Input 1-10	0	0		
7	control voltage +	analoginput 5/7	0	+10	AI 5+	AI 7+
8	standby	output 1	max. +30/1A		DO 0	DO 8
9	error keeping till new start	output 3	max. +30/1A		DO 2	DO 10
10	COM 1	signal ground output 1-4				
11	warning dynamic	output 5	max. +30/1A		DO 4	DO 12
12	job-warning	output 7	max. +30/1A		DO 6	DO 14
13	COM 2	signal ground output 5-8				
14	program-number. 2	input 2	+15	+30	DI 1	DI 9
15	program-number. 8	input 4	+15	+30	DI 3	DI 11
16	program-number. 32	iInput 6	+15	+30	DI 5	DI 13
17	program-number. 128	input 8	+15	+30	DI 7	DI 15
18	job-start	input 10	+15	+30	DI 18	DI 19
19	nc	no connect				
20	control voltage	signal ground analog input 5/7	0	0	AI 5-	AI 7-
21	warning keeping till new start	output 2	max. +30/1A		DO 1	DO 9
22	job-error	output 4	max. +30/1A		DO 3	DO 11
23	COM 1	signal ground output 1-4				
24	error dynamic	output 6	max. +30/1A		DO 5	DO 13
25	job o.k.	output 8	max. +30/1A		DO 7	DO 15

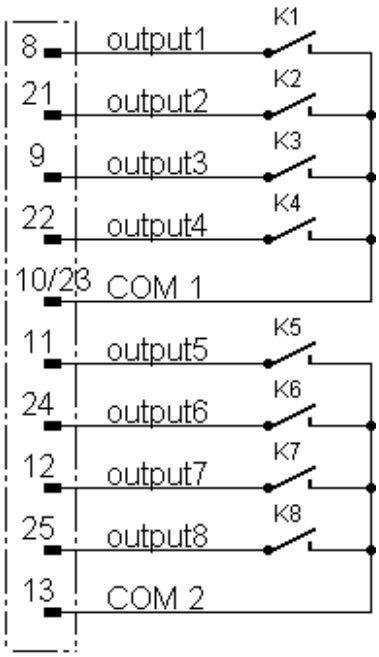
Connector	Typ/standard	pole number
DIGINOUT	D-SUB plug	25-pins

state: 26.04.2006	sign.:O. Hollmann

DIGINOUT



allocation diagramm
digital and control
voltage inputs



allocation diagramm
digital outputs