 DANFYSIK Route diagram for magnet		Ship date: 1/8-2017	Customer: AU/ESS	Description: 2 pcs. Raster Scanning Magnet with ferrite yokes Ceramic Vacuum Chamber	Order no.: 502446	Main drawing number: 7103033532
Magnet no.: 16653, 16654						
Operation snr.	Operation	Operation type	Specification and comments			
1.	Ferrite dimension control at reception	Test	Drawing no.: 7103033505 and 7103033506 Fill out test sheets: 502446004 and 502446005 <i>In case of significant chips in ferrite: fill out NCR with photo documentation. Save boxes from supplier – they should be reused for delivery.</i>			
2.	Vacuum test and dimension control of ceramic vacuum chamber	Test	Drawing no.: 7103033656 Fill out 502466006 – Vacuum test			
3.	Montage	Assembling	Drawing no.: 7103033532 and 7103033504 <i>Ferrites are to be sorted according to the dimension control in order to have best possible air gap.</i>			
4.	Complete magnet test	Test	Fill out test sheet: 502446003			
5.	Final assembly	Assembling	Mount data sign Final visual control.			
6.	Packing etc.	Shipping	Magnet is assembled and boxed			



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Doc. No.: 502446003		Description: COMPLETE MAGNET TEST		Product description: ISA Raster magnets		
Order No.: 502446		Customer: Arhus University		Part/drawing No.: 7103033504 and 7103033532		
				Magnet No.: 16653 and 16654		
To be carried out after assembling						
No.	Description	Test equipment (DF Reg. Nr.)	Result measured	Criteria and tolerance	Accepted	Sign./Date
1	Insulation test: Coil to ground (Aluminum magnet frame) 1 kV for one minute	12911	$t_{\text{applied}} = \underline{1} / \underline{\quad} \text{ min}$ $I_{\text{Leak}} = \underline{0} / \underline{\quad} \mu\text{A}$ Break down: Yes / No	$t \geq 1 \text{ min.}$ $I < 100 \mu\text{A}$ No sign of break down	Magnet No: 16653 OK Magnet No: 16654 OK	13/11-17 Bbk. 24/11-17 Bbk
2	Magnet inductance Measured between coil terminals		20 kHz = <u>7.8</u> μH 100 kHz = <u>7.8</u> μH	7.8 μH +/-10%	M:t med kabel i stedet for busbar OK	28/11-17 CAPE
3	Data label – Is it mounted?			Ok / not ok	OK	08/11 17 CAPE
4	Visual inspection according to main drawing Check ceramic chambers, brazing, screws, BOM etc.			Ok / not ok	Chamber not installed OK	08/11 17 CAPE





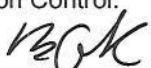
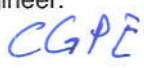
DANFYSIK

Doc. No.: 502446003		Description: COMPLETE MAGNET TEST		Product description: ISA Raster magnets		
Order No : 502446		Customer: Arhus University		Part/drawing No.: 7103033504 and 7103033532		Magnet No.: 16653 and 16654
To be carried out after assembling						
No.	Description	Test equipment (DF Reg. Nr.)	Result measured	Criteria and tolerance	Accepted	Sign./Date
Remarks:						
Production Control:			Project Manager:			
Sign:			Sign:			


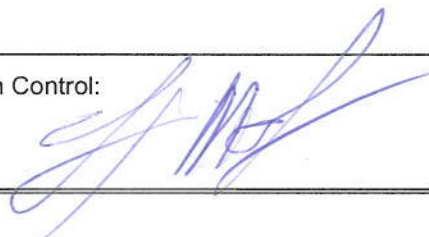
DANFYSIK QUALITY ASSURANCE SYSTEM

 DANFYSIK			Item: Ferrites – Return yoke		Date: 1/12-2017	
DWG. No.: 7103033506			Customer: AU/ESS		Order No : 502446 Raster Scanning Magnet	
Mechanical Inspection						
Inspection	Dimensions acc. To 7103033506					
	Drawing		Inspection			
	Dim.	Tol.	Ferrite 1	Ferrite 2	Ferrite 3	Ferrite 4
Dim.	230	± 0,1	✓	✓	✓	✓
Dim.	100	± 0,1	✓	✓	✓	✓
Dim.	20	± 0,1	✓	✓	✓	✓
Visual*			✓	✓	✓	✓
		0,05	✓	✓	✓	✓
// with A		0,05	✓	✓	✓	✓
Remarks: *Visual inspection to check for cracks and chips and also edges and if surface are according to drawing.						
Production Control: Sign: 			Project Engineer: Sign: 			

DANFYSIK QUALITY ASSURANCE SYSTEM

 DANFYSIK		Item: Ferrites – Top/Bottom yoke		Date: 1/12-2017		
DWG. No.: 7103033505		Customer: AU/ESS		Order No : 502446 Raster Scanning Magnet		
Mechanical Inspection						
Inspection	Dimensions acc. To 7103033505					
	Drawing		Inspection			
	Dim.	Tol.	Ferrite 1	Ferrite 2	Ferrite 3	Ferrite 4
Dim.	230	± 0,1	✓	✓	✓	✓
Dim.	160	± 0,1	✓	✓	✓	✓
Dim.	20	± 0,1	✓	✓	✓	✓
Visual*			✓	✓	✓	✓
		0,05	✓	✓	✓	✓
// with A		0,05	✓	✓	✓	✓
Remarks: *Visual inspection to check for cracks and chips and also edges and if surface are according to drawing.						
Production Control: Sign: 			Project Engineer: Sign: 			

DANFYSIK QUALITY ASSURANCE SYSTEM

 DANFYSIK	Magnet No.: 16653 and 16654	Date: 28/2-18		
Main assembly No: 7103033532	Customer: AU/ESS	Order No.: 502466 Raster Scanning Magnet		
VACUUM TEST SHEET FOR CERAMIC CHAMBER				
PART NO.		Chamber part No. 7103033535		
SERIES NO.		Magnet no. 16653 and 16654		
Chamber marked*.				
HELIUM VACUUM TEST				
CONDITION		1·10 ⁻¹⁰ mbar·l·sec ⁻¹		
	TIME	mbar·l/sec	SIGN	DATE
TEST OF MACHINE	12 50	1,8 × 10⁻⁷	(Car)	28/2-18
PUMPING START	12 55		(Car)	28/2-18
HELIUM TEST WITH COVERED CHAMBER	13 05	0,0 × 10⁻¹⁰	(Car)	28/2-18
TEST FINISHED		0,0 × 10⁻¹⁰	(Car)	28/2-18
TEST OF MACHINE		1,8 × 10⁻⁷	(Car)	28/2-18
Remarks: *Mark each of the chambers before vacuum test for identity, use 502466 X. X is number 1, 2 etc.				
Production Control:		Project Manager:		
Sign.: 		Sign.:		