

Class of Instrument	AA99					
	Equity instruments- Share	s and share certificates				
Tick Size	not used					
Information on whether a	In average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
	es ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XNGS New York - NA	SDAQ (NAD)	98,97 %	89,66 %	100,00 %	0,00 %	100,00 %
XNYS New York (NY	SE) (NAY)	0,99 %	6,90 %	100,00 %	0,00 %	100,00 %
PINX New York-Pink	ShOTC (NUP)	0,04 %	3,45 %	100,00 %	0,00 %	0,00 %



Class of Instrument	AA99 Equity instruments- Share	es and share certificates					
Tick Size liquidity band A and liquidity band B							
Information on whether a	n average of $< 1$ trade per b	usiness day was executed in	the previous year: N				
	s ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
XNYS New York (NYS	SE) (NAY)	54,84 %	58,38 %	100,00 %	0,00 %	100,00 %	
XNGS New York - NA	SDAQ (NAD)	25,65 %	23,49 %	100,00 %	0,00 %	100,00 %	
XETR XETRA (EDE)		16,31 %	16,23 %	100,00 %	0,00 %	10,64 %	
XSTU Stuttgart (EDS)		2,05 %	0,35 %	100,00 %	0,00 %	100,00 %	
XASX Sydney (AAS)		1,00 %	0,17 %	100,00 %	0,00 %	100,00 %	



Class of Instrument	AA99							
	Equity instruments- Share	es and share certificates						
Tick Size	ick Size liquidity band C and liquidity band D							
Information on whether a	n average of $< 1$ trade per b	ousiness day was executed in	the previous year: N					
Top five execution venues ranked in terms of trading volumes (descending order)Proportion of volume traded as a percentage of total in that classProportion of orders executed as percentage of total in that classPercentage of passive ordersPercentage of aggressive ordersPercentage of directed orders								
XETR XETRA (EDE)		47,85 %	27,29 %	100,00 %	0,00 %	50,27 %		
XSWX Zürich (ESE)		14,46 %	18,89 %	100,00 %	0,00 %	100,00 %		
XDUB Dublin (EYD)		9,83 %	16,43 %	100,00 %	0,00 %	94,12 %		
XLON London (EUL)		7,84 %	13,38 %	100,00 %	0,00 %	100,00 %		
XCSE Kopenhagen (Sl	DC)	7,83 %	9,61 %	100,00 %	0,00 %	100,00 %		



Class of Instrument	AA99							
	Equity instruments- Share	es and share certificates						
Tick Sizeliquidity band E and liquidity band F								
Information on whether a	n average of $< 1$ trade per b	ousiness day was executed in	the previous year: N					
Top five execution venues ranked in terms of trading volumes (descending order)Proportion of volume traded as a percentage of total in that classProportion of orders executed as percentage of total in that classPercentage of passive ordersPercentage of aggressive ordersPercentage of directed orders								
XETR XETRA (EDE)		27,72 %	18,29 %	100,00 %	0,00 %	62,46 %		
XNYS New York (NYS	SE) (NAY)	19,22 %	37,14 %	100,00 %	0,00 %	100,00 %		
XNGS New York - NA	SDAQ (NAD)	12,71 %	8,93 %	100,00 %	0,00 %	100,00 %		
XPAR Paris (EFP)		8,74 %	6,67 %	100,00 %	0,00 %	90,31 %		
XLON London (EUL)		6,57 %	6,65 %	100,00 %	0,00 %	99,89 %		



Class of Instrument	AB99							
	Equity instruments- Share	es and share certificates						
Tick Size	liquidity band A and liquidity band B							
Information on whether a	n average of $< 1$ trade per b	ousiness day was executed in	the previous year: Y					
	s ranked in terms of trading cending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders		
XNGS New York - NAS	SDAQ (NAD)	66,26 %	89,29 %	100,00 %	0,00 %	100,00 %		
XFRA Frankfurt (EDF)		31,98 %	8,73 %	100,00 %	0,00 %	18,18 %		
XETR XETRA (EDE)		1,52 %	0,79 %	100,00 %	0,00 %	100,00 %		
XNYS New York (NYS	E) (NAY)	0,24 %	1,19 %	100,00 %	0,00 %	100,00 %		



Class of Instrument AB99

Equity instruments- Shares and share certificates

Tick Size liquidity band C and liquidity band D

Information on whether an average of < 1 trade per business day was executed in the previous year: Y

Top five execution venues ranked in terms of tradin volumes (descending order)	g Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
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XETR XETRA (EDE)

100,00 %

100,00 %

100,00 %

0,00 %

0.00 %



Class of Instrument	AC99						
	Exchange traded products (ETPs)Exc						
Tick Size	not used						
		ousiness day was executed in	the provious year N				
information on whether a	in average of < 1 trade per t	business day was executed in	the previous year. N				
	es ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
XETR XETRA (EDE)		55,13 %	77,62 %	100,00 %	0,00 %	79,50 %	
BRFQ BIOCKMATCH	H MTF RFQ (BRFQ)	32,99 %	16,09 %	100,00 %	0,00 %	100,00 %	
XLON London (EUL)		11,36 %	5,95 %	100,00 %	0,00 %	100,00 %	
XSWX Zürich (ESE)		0,25 %	0,15 %	100,00 %	0,00 %	100,00 %	
XFRA Frankfurt (EDF	)	0,21 %	0,15 %	100,00 %	0,00 %	37,50 %	



Class of Instrument	AD99 other instruments					
Tick Size	not used					
Information on whether a	n average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
	s ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XVTX Zurich - Swiss I	Blue (ESZ)	68,13 %	71,29 %	100,00 %	0,00 %	100,00 %
XSWX Zürich (ESE)		31,87 %	28,71 %	100,00 %	0,00 %	100,00 %



AE99					
other instruments					
not used					
an average of $< 1$ trade per b	ousiness day was executed in	the previous year: Y			
es ranked in terms of trading scending order)		Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
	65,93 %	62,12 %	100,00 %	0,00 %	100,00 %
	31,11 %	22,73 %	100,00 %	0,00 %	100,00 %
	2,86 %	3,03 %	100,00 %	0,00 %	50,00 %
	0,10 %	7,58 %	100,00 %	0,00 %	0,00 %
	0,00 %	4,55 %	100,00 %	0,00 %	0,00 %
	other instruments not used an average of < 1 trade per b es ranked in terms of trading scending order)	other instruments not used an average of < 1 trade per business day was executed in ess ranked in terms of trading scending order) Proportion of volume traded as a percentage of total in that class 65,93 % 31,11 % 2,86 % 0,10 %	other instruments not usedan average of < 1 trade per business day was executed in the previous year: Y	other instruments not used an average of < 1 trade per business day was executed in the previous year: Yss ranked in terms of trading scending order)Proportion of volume traded as a percentage of total in that classProportion of orders executed as percentage of total in that classPercentage of passive orders65,93 %62,12 %100,00 %31,11 %22,73 %100,00 %2,86 %3,03 %100,00 %0,10 %7,58 %100,00 %	other instruments not used an average of < 1 trade per business day was executed in the previous year: Yest ranked in terms of trading scending order)Proportion of volume traded as a percentage of total in that classProportion of orders executed as percentage of total in that classPercentage of passive ordersPercentage of aggressive orders65,93 %62,12 %100,00 %0,00 %31,11 %22,73 %100,00 %0,00 %2,86 %3,03 %100,00 %0,00 %0,10 %7,58 %100,00 %0,00 %



Class of Instrument	BA10 Debt instruments					
Tick Size	not used					
Information on whether a	an average of $< 1$ trade per b	usiness day was executed in	the previous year: N			
	es ranked in terms of trading escending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XOFF Bloomberg (BI	LOM)	87,23 %	60,32 %	100,00 %	0,00 %	100,00 %
XFRA Frankfurt (EDF	<sup>(</sup> )	8,63 %	27,43 %	100,00 %	0,00 %	31,72 %
XSTU Stuttgart (EDS)	)	4,14 %	12,24 %	100,00 %	0,00 %	93,98 %



Class of Instrument	BA11 Debt instruments					
Tick Size	not used					
Information on whether	an average of $< 1$ trade per b	ousiness day was executed in	the previous year: Y			
	ues ranked in terms of trading lescending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XOFF Bloomberg (B	BLOM)	78,28 %	25,00 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS	5)	12,60 %	25,00 %	100,00 %	0,00 %	100,00 %
XFRA Frankfurt (ED	F)	9,12 %	50,00 %	100,00 %	0,00 %	0,00 %



Class of Instrument	BA14					
	Debt instruments					
Tick Size	not used					
Information on whether	t an average of $< 1$ trade per b	ousiness day was executed in	the previous year: N			
	ues ranked in terms of trading lescending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XOFF Bloomberg (E	BLOM)	57,03 %	35,88 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS	S)	26,20 %	40,11 %	100,00 %	0,00 %	98,47 %
XFRA Frankfurt (ED	DF)	16,61 %	23,84 %	100,00 %	0,00 %	42,06 %
XHAM Hamburg (ED	DH)	0,13 %	0,11 %	100,00 %	0,00 %	0,00 %
DUSA Düsseldorf (E	CDD)	0,02 %	0,06 %	100,00 %	0,00 %	100,00 %



Class of Instrument	BA15 Debt instruments					
Tick Size	not used					
Information on whether	an average of $< 1$ trade per b	ousiness day was executed in	the previous year: Y			
	es ranked in terms of trading escending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XOFF Bloomberg (Bl	LOM)	36,77 %	12,58 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS	)	35,87 %	54,30 %	100,00 %	0,00 %	100,00 %
XFRA Frankfurt (EDI	F)	27,36 %	33,11 %	100,00 %	0,00 %	28,00 %



Class of Instrument	BE21 securitized derivatives						
Tick Size	not used						
Information on whether a	Information on whether an average of < 1 trade per business day was executed in the previous year: N						
	es ranked in terms of trading escending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders	
XSTU Stuttgart (EDS)	)	95,57 %	78,12 %	100,00 %	0,00 %	95,33 %	
XFRA Frankfurt (EDF	7)	4,43 %	21,88 %	100,00 %	0,00 %	78,85 %	



Class of Instrument	BE23					
	securitized derivatives					
T: -1- C:						
Tick Size	not used					
Information on whether a	In average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
					-	<b>-</b>
	es ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XFRA Frankfurt (EDF	)	100,00 %	100,00 %	100,00 %	0,00 %	0,00 %



Class of Instrument	BE99 securitized derivatives					
Tick Size	not used					
Information on whether a	an average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
Top five execution venues ranked in terms of trading volumes (descending order)Proportion of volume traded as a percentage of total in that classProportion of orders 						
DUSA Düsseldorf (ED	DD)	93,99 %	57,14 %	100,00 %	0,00 %	75,00 %
XSTU Stuttgart (EDS)	)	5,99 %	33,33 %	100,00 %	0,00 %	85,71 %
XFRA Frankfurt (EDF	7)	0,01 %	9,52 %	100,00 %	0,00 %	0,00 %



Class of Instrument	BF99					
	Exchange traded products	(ETPs)				
Fick Size	not used					
nformation on whether a	an average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
	es ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
KETR XETRA (EDE)		100,00 %	100,00 %	100,00 %	0,00 %	59,15 %



Class of Instrument	C999 no specific classification					
Tick Size	not used					
Information on whether a	an average of $< 1$ trade per b	usiness day was executed in	the previous year: Y			
-	es ranked in terms of trading escending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
XFRA Frankfurt (EDF	F)	62,94 %	20,00 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	)	37,06 %	80,00 %	100,00 %	0,00 %	100,00 %



Class of Instrument	CA99					
	Debt instruments					
Tick Size	not used					
Information on whether a	in average of $< 1$ trade per bu	usiness day was executed in	the previous year: Y			
	es ranked in terms of trading scending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
KOFF Bloomberg (BL	.OM) 1	100,00 %	100,00 %	100,00 %	0,00 %	100,00 %



Class of Instrument	CB99 Other instruments					
Tick Size	not used					
Information on whether a	an average of < 1 trade per b	ousiness day was executed in	the previous year: Y			
	es ranked in terms of trading escending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
WIAX Warburg Invest	AG (WIAG)	52,26 %	78,57 %	100,00 %	0,00 %	63,64 %
XFRA Frankfurt (EDF	7)	36,32 %	14,29 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	)	11,42 %	7,14 %	100,00 %	0,00 %	100,00 %