

Class of Instrument AA99

Equity instruments- Shares and share certificates

Tick Size not used

Top five execution venues ranked in terms of trading volumes (descending 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
XLON London (EUL)	53,12 %	1,05 %	100,00 %	0,00 %	100,00 %
XETR XETRA (EDE)	22,50 %	42,93 %	32,93 %	67,07 %	100,00 %
XNYS New York (NYSE) (NAY)	17,47 %	10,47 %	100,00 %	0,00 %	100,00 %
XTSE Toronto Pure (NCP)	2,36 %	10,99 %	100,00 %	0,00 %	100,00 %
GLBX GLOBEX (NAX)	1,38 %	10,99 %	100,00 %	0,00 %	100,00 %
GLBX GLOBEX (NAX)	1,38 %	10,99 %	100,00 %	0,00 %	100,00 %



Class of Instrument AA

AA99

Equity instruments- Shares and share certificates

Tick Size

liquidity band A and liquidity band B

Top five execution venues ranked in terms of trading volumes (descending 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
XLON London (EUL)	46,19 %	44,83 %	100,00 %	0,00 %	100,00 %
XSWX Zürich (ESE)	39,40 %	36,38 %	100,00 %	0,00 %	100,00 %
XNYS New York (NYSE) (NAY)	4,53 %	5,16 %	100,00 %	0,00 %	100,00 %
XETR XETRA (EDE)	3,64 %	4,46 %	73,39 %	26,61 %	100,00 %
XNAS New York - NASDAQ (NAD)	2,41 %	1,02 %	100,00 %	0,00 %	100,00 %



Class of Instrument

AA99

Equity instruments- Shares and share certificates

Tick Size

liquidity band C and liquidity band D

Top five execution venues ranked in terms of trading volumes (descending 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)	54,47 %	43,86 %	50,90 %	49,10 %	100,00 %
XNYS New York (NYSE) (NAY)	34,08 %	39,40 %	100,00 %	0,00 %	100,00 %
XOSL Oslo (SNO)	2,53 %	5,57 %	100,00 %	0,00 %	100,00 %
XLON London (EUL)	2,46 %	3,89 %	100,00 %	0,00 %	100,00 %
XPAR Paris (EFP)	2,40 %	1,78 %	100,00 %	0,00 %	100,00 %



Class of Instrument AA99

Equity instruments- Shares and share certificates

Tick Size liquidity band E and liquidity band F

Top five execution venues ranked in terms of trading volumes (descending 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)	30,68 %	20,14 %	73,64 %	26,36 %	99,99 %
XNYS New York (NYSE) (NAY)	26,23 %	33,17 %	100,00 %	0,00 %	100,00 %
XNAS New York - NASDAQ (NAD)	15,44 %	11,50 %	100,00 %	0,00 %	100,00 %
XPAR Paris (EFP)	9,15 %	7,18 %	100,00 %	0,00 %	100,00 %
XLON London (EUL)	6,53 %	4,23 %	100,00 %	0,00 %	100,00 %



Class of Instrument A

AB99

Equity instruments- Shares and share certificates

Tick Size not used

Top five execution venues ranked in terms of trading volumes (descending 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 (NYSE) (NAY)	82,02 %	95,83 %	100,00 %	0,00 %	100,00 %
PINX New York-PinkShOTC (NUP)	17,98 %	4,17 %	100,00 %	0,00 %	100,00 %



Class of Instrument

AB99

Equity instruments- Shares and share certificates

Tick Size

liquidity band A and liquidity band B

Top five	execution venues ranked in terms of trading volumes (descending 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
XLON	London (EUL)	53,65 %	22,47 %	100,00 %	0,00 %	100,00 %
XNYS	New York (NYSE) (NAY)	20,41 %	62,92 %	100,00 %	0,00 %	100,00 %
PINX	New York-PinkShOTC (NUP)	14,39 %	3,37 %	100,00 %	0,00 %	100,00 %
XFRA	Frankfurt (EDF)	10,61 %	8,99 %	100,00 %	0,00 %	100,00 %
XDUS	Düsseldorf (EDD)	0,63 %	1,12 %	0,00 %	100,00 %	100,00 %



Class of Instrument

AB99

Equity instruments- Shares and share certificates

Tick Size

liquidity band C and liquidity band D

Top five execution venues ranked in terms of trading volumes (descending 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)	35,82 %	8,62 %	100,00 %	0,00 %	100,00 %
XNYS New York (NYSE) (NAY)	22,27 %	28,29 %	100,00 %	0,00 %	100,00 %
XLON London (EUL)	12,81 %	5,52 %	100,00 %	0,00 %	100,00 %
XETR XETRA (EDE)	12,51 %	6,74 %	6,56 %	93,44 %	100,00 %
XSTU Stuttgart (EDS)	8,97 %	5,52 %	0,00 %	100,00 %	100,00 %



Class of Instrument

AB99

Equity instruments- Shares and share certificates

Tick Size

liquidity band E and liquidity band F

Top five execution venues ranked in terms of trading volumes (descending 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)	78,57 %	89,77 %	48,73 %	51,27 %	100,00 %
XNAS New York - NASDAQ (NAD)	21,43 %	10,23 %	100,00 %	0,00 %	100,00 %



Class of Instrument AC

AC99

Exchange traded products (ETPs)Exc

Tick Size

not used

Top five	execution venues ranked in terms of trading volumes (descending 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
BRFQ	BIOCKMATCH MTF RFQ (BRFQ)	79,71 %	79,29 %	100,00 %	0,00 %	100,00 %
XETR	XETRA (EDE)	12,45 %	9,09 %	28,29 %	71,71 %	100,00 %
XLON	London (EUL)	5,05 %	7,03 %	100,00 %	0,00 %	100,00 %
XAMS	Amsterdam (ENA)	1,40 %	2,74 %	100,00 %	0,00 %	100,00 %
XSWX	Zürich (ESE)	0,63 %	1,30 %	100,00 %	0,00 %	100,00 %



Class of Instrument

AD99

other instruments

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
XSWX Zürich (ESE)	76,24 %	68,10 %	100,00 %	0,00 %	100,00 %
XSWX Zurich - Swiss Blue (ESZ)	22,56 %	31,60 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	0,62 %	0,05 %	0,00 %	100,00 %	100,00 %
XFRA Frankfurt (EDF)	0,58 %	0,26 %	100,00 %	0,00 %	100,00 %



Class of Instrument

AE99

other instruments

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
XSWX Zürich (ESE)	71,91 %	17,78 %	100,00 %	0,00 %	43,75 %
XFRA Frankfurt (EDF)	23,00 %	3,89 %	100,00 %	0,00 %	71,43 %
XETR XETRA (EDE)	2,86 %	37,22 %	77,61 %	22,39 %	7,46 %
XMAD Madrid (EEM)	1,53 %	32,22 %	100,00 %	0,00 %	27,59 %
XHAM Hamburg (EDH)	0,37 %	2,22 %	25,00 %	75,00 %	25,00 %



Class of Instrument

BA10

Debt instruments

Tick Size

not used

Top five	execution venues ranked in terms of trading volumes (descending 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
BMTF	Bloomberg (BLOM)	96,60 %	93,53 %	100,00 %	0,00 %	99,94 %
XFRA	Frankfurt (EDF)	3,08 %	6,32 %	100,00 %	0,00 %	100,00 %
XMUN	München (EDM)	0,21 %	0,01 %	0,00 %	100,00 %	100,00 %
XSTU	Stuttgart (EDS)	0,10 %	0,13 %	0,00 %	100,00 %	100,00 %
XDUS	Düsseldorf (EDD)	0,01 %	0,01 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BA11

Debt instruments

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
BMTF Bloomberg (BLOM)	96,42 %	81,82 %	100,00 %	0,00 %	97,53 %
XFRA Frankfurt (EDF)	3,43 %	17,17 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	0,15 %	1,01 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BA12

Debt instruments

Tick Size

not used

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 trading volumes (descending 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
DMTE Plaambarg (DLOM)	100 00 9/	100 00 9/	100 00 9/	0.00.9%	100 00 9/

BMTF Bloomberg (BLOM)

100,00 %

100,00 %

100,00 %

0,00 %

100,00 %



Class of Instrument

BA13

Debt instruments

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
BMTF Bloomberg (BLOM)	98,56 %	98,47 %	100,00 %	0,00 %	99,51 %
XSTU Stuttgart (EDS)	0,90 %	0,32 %	0,00 %	100,00 %	100,00 %
XFRA Frankfurt (EDF)	0,36 %	1,05 %	100,00 %	0,00 %	100,00 %
XMUN München (EDM)	0,09 %	0,08 %	0,00 %	100,00 %	100,00 %
XHAM Hamburg (EDH)	0,09 %	0,08 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BA14

Debt instruments

Tick Size

not used

Top five	execution venues ranked in terms of trading volumes (descending 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
BMTF	Bloomberg (BLOM)	85,55 %	61,29 %	100,00 %	0,00 %	99,79 %
XFRA	Frankfurt (EDF)	12,04 %	35,82 %	100,00 %	0,00 %	100,00 %
XSTU	Stuttgart (EDS)	1,49 %	2,01 %	0,81 %	99,19 %	100,00 %
XMUN	München (EDM)	0,35 %	0,54 %	0,00 %	100,00 %	100,00 %
XBER	Berlin-Bremen (EDB)	0,32 %	0,18 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BA15

Debt instruments

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
BMTF Bloomberg (BLOM)	87,34 %	66,40 %	100,00 %	0,00 %	99,87 %
XFRA Frankfurt (EDF)	11,21 %	31,87 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	1,15 %	1,31 %	0,00 %	100,00 %	100,00 %
XBER Berlin-Bremen (EDB)	0,17 %	0,17 %	0,00 %	100,00 %	100,00 %
XMUN München (EDM)	0,07 %	0,13 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BD10

other derivatives

Tick Size

not used

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 trading volumes (descending order)	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders

XEUR EUREX (EDT)

100,00 %

100,00 %

53,85 %

46,15 %

100,00 %



Class of Instrument

BD21

Equity derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
XEUR EUREX (EDT)	83,83 %	79,67 %	98,29 %	1,71 %	100,00 %
XCBO Chicago (CBOE) (NAV)	16,17 %	20,33 %	100,00 %	0,00 %	100,00 %



Class of Instrument

BD99

other derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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
XEUR EUREX (EDT)	58,39 %	65,52 %	85,96 %	14,04 %	100,00 %
XCME Chicago (CME) (NAG)	41,04 %	13,79 %	100,00 %	0,00 %	100,00 %
XCBO Chicago (CBOE) (NAV)	0,57 %	20,69 %	100,00 %	0,00 %	100,00 %



Class of Instrument

BE21

securitized derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	50,39 %	35,95 %	4,75 %	95,25 %	100,00 %
XFRA Frankfurt (EDF)	49,60 %	63,83 %	100,00 %	0,00 %	99,96 %
XNYS New York (NYSE) (NAY)	0,00 %	0,06 %	100,00 %	0,00 %	100,00 %
XASE New York (AMEX) (NAA)	0,00 %	0,11 %	100,00 %	0,00 %	100,00 %
XSWX Zürich (ESE)	0,00 %	0,06 %	100,00 %	0,00 %	100,00 %



Class of Instrument

BE22

securitized derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	79,21 %	59,65 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	19,72 %	35,96 %	0,00 %	100,00 %	100,00 %
XETR XETRA (EDE)	0,85 %	1,75 %	0,00 %	100,00 %	100,00 %
XLON London (EUL)	0,22 %	2,63 %	100,00 %	0,00 %	100,00 %



Class of Instrument E

BE24

securitized derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	99,43 %	97,83 %	100,00 %	0,00 %	100,00 %
XETR XETRA (EDE)	0,57 %	2,17 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BE99

securitized derivatives

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	75,18 %	84,78 %	100,00 %	0,00 %	100,00 %
XSTU Stuttgart (EDS)	15,45 %	4,04 %	0,00 %	100,00 %	100,00 %
BMTF Bloomberg (BLOM)	7,37 %	5,90 %	100,00 %	0,00 %	100,00 %
XDUS Düsseldorf (EDD)	0,73 %	0,62 %	0,00 %	100,00 %	100,00 %
XBER Berlin-Bremen (EDB)	0,66 %	0,31 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BF99

Exchange traded products (ETPs)

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	78,50 %	86,90 %	5,48 %	94,52 %	100,00 %
XSTU Stuttgart (EDS)	13,92 %	1,19 %	0,00 %	100,00 %	100,00 %
XLON London (EUL)	4,88 %	10,71 %	100,00 %	0,00 %	100,00 %
XHAM Hamburg (EDH)	2,70 %	1,19 %	0,00 %	100,00 %	100,00 %



Class of Instrument

BG99

Exchange traded products (ETPs)

Tick Size

not used

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 trading volumes (descending 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)

100,00 %

100,00 %

100,00 %

0,00 %

100,00 %



Class of Instrument

C999

no specific classification

Tick Size

not used

Top five execution venues ranked in terms of trading volumes (descending 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)	50,56 %	29,81 %	0,00 %	100,00 %	100,00 %
XFRA Frankfurt (EDF)	27,57 %	34,62 %	100,00 %	0,00 %	100,00 %
XMUN München (EDM)	11,72 %	2,88 %	0,00 %	100,00 %	100,00 %
XHAM Hamburg (EDH)	8,38 %	28,85 %	0,00 %	100,00 %	100,00 %
XDUS Düsseldorf (EDD)	1,77 %	3,85 %	0,00 %	100,00 %	100,00 %



Class of Instrument

CA99

Debt instruments

Tick Size

not used

Information on whether an average of < 1 trade per business 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 class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
DMTE DI 1 (DIOM)	100 00 0/	100.00.0/	100.00.0/	0.00.0/	100.00.0/

BMTF Bloomberg (BLOM)

100,00 %

100,00 %

100,00 %

0,00 %

100,00 %



Class of Instrument

CB99

Other instruments

Tick Size

not used

Top five execution venues ranked in terms of tradir volumes (descending 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)	98,94 %	99,66 %	100,00 %	0,00 %	100,00 %
XFRA Frankfurt (EDF)	0,76 %	0,23 %	100,00 %	0,00 %	100,00 %
XAMS Amsterdam (ENA)	0,21 %	0,02 %	100,00 %	0,00 %	100,00 %
XMUN München (EDM)	0,04 %	0,02 %	0,00 %	100,00 %	100,00 %
XSTU Stuttgart (EDS)	0,03 %	0,05 %	0,00 %	100,00 %	100,00 %