.... MassMutual Ascend

Index Frontier® 7

AT A GLANCE

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

Index Frontier® 7

Issue ages

Qualified: 0-80 Non-qualified: 0-80 Inherited IRA: 0-75 Inherited non-qualified: 0-75

Tax qualifications

- Non-qualified and inherited non-qualified
- IRA (traditional, Roth, SEP, SIMPLE, and inherited)
- 401(a) (including 401(k) traditional and Roth)
- 403(b) (traditional and Roth)
- Governmental 457(b) (traditional and Roth)

Purchase payments

- Issued with single purchase payment
- Subsequent purchase payments accepted in first two contract months
- All purchase payments are paid into purchase payment account, then moved into interest strategies at the start of the next term
- Minimum: \$25,000
- Subsequent: \$10,000
- Maximum: \$1 million (ages 0-80)

Waiver riders

- Extended Care Waiver 100% account value when criteria met
- Terminal Illness Waiver 100% account value when criteria met

Early withdrawal charges

Seven-year declining early withdrawal charges starting at 8%.

Penalty-free withdrawals

- During first contract year, 10% of purchase payments
- After first contract anniversary, 10% of the account value as of the most recent contract anniversary

Annuity payout value

The account value on the annuity payout initiation date (reduced by premium taxes, if applicable).

Crediting strategies

Declared rate

S&P 500®

- 10% Buffer Indexed Strategy
- -10% Floor Indexed Strategy
- 0% Floor Indexed Strategy

iShares MSCI EAFE

- -10% Floor Indexed Strategy
- 0% Floor Indexed Strategy

iShares U.S. Real Estate

- -10% Floor Indexed Strategy
- 0% Floor Indexed Strategy

SPDR Gold Shares

- -10% Floor Indexed Strategy
- 0% Floor Indexed Strategy

Bailout right

On indexed strategies, early withdrawal charges are waived if the cap for an indexed strategy ever falls below its bailout trigger.

Payout options

- Fixed period payout
- Life payout
- Life payout with payments for at least a fixed period
- Joint and one-half survivor payout

Death benefit value

Death benefit is the greater of the account value or the purchase payments, reduced proportionately for withdrawals. Annuities are intended to be long-term products and may not be suitable for all investors. Withdrawals from an annuity contract may have tax consequences.

This product can only be sold through a Broker/Dealer that is contracted with MassMutual Ascend Life Insurance Company. Any sales solicitation must be accompanied or preceded by a prospectus. To obtain a copy of the prospectus, please visit MassMutualAscend.com/RILArates. The prospectus contains important information about the Index Frontier 7 annuity and MassMutual Ascend. Read it carefully to learn more about the features of the Index Frontier 7 annuity.

The S&P 500 Index is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and has been licensed for use by MassMutual Ascend. Standard & Poor's[®], SPDR[®] and S&P[®] are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones[®] is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by MassMutual Ascend. MassMutual Ascend's products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, or their respective affiliates, and none of such parties makes any representation regarding the advisability of investing in such products nor do they have any liability for any errors, omissions, or interruptions of the S&P 500 Index.

The iShares MSCI EAFE ETF and the iShares U.S. Real Estate ETF are distributed by BlackRock Investments, LLC. iShares[®], BLACKROCK[®], and the corresponding logos are registered and unregistered trademarks of BlackRock, Inc. and its affiliates ("BlackRock"), and these trademarks have been licensed for certain purposes by MassMutual Ascend. MassMutual Ascend annuity products are not sponsored, endorsed, sold or promoted by BlackRock, and purchasers of an annuity from MassMutual Ascend do not acquire any interest in the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF nor enter into any relationship of any kind with BlackRock. BlackRock makes no representation or warranty, express or implied, to the owners of any MassMutual Ascend annuity product or any member of the public regarding the advisability of purchasing an annuity, nor does it have any liability for any errors, omissions, interruptions or use of the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF or the iShares U.S. Real Estate ETF or any data related thereto.

Principal Underwriter/Distributor: MM Ascend Life Investor Services, LLC, member FINRA and an affiliate of MassMutual Ascend.

Product issued by MassMutual Ascend Life Insurance Company (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual), under contract form P1822317NW and rider forms R1462316NW and R1462416NW (not available in Massachusetts). Form numbers, features and availability may vary by state.

This marketing material is intended only to provide a summary of this annuity product. In order to obtain a complete understanding, please read the contract provisions carefully as this is not intended to be a substitute for the contract.

All guarantees subject to the claims-paying ability of MassMutual Ascend.

For producer use only. Not for use in sales solicitation.

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

MassMutual Ascend

© 2022 MassMutual Ascend Life Insurance Company, Cincinnati, OH 45202. All rights reserved. www.MassMutualAscend.com B1844922NW